

LOC284950.

[49764] LOC284982 (Accession XP_211721.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC284982 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC284982, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284982 BINDING SITE, designated SEQ ID:7724, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49765] Another function of GAM7052 is therefore inhibition of LOC284982 (Accession XP_211721.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284982.

[49766] LOC285058 (Accession XP_211753.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC285058 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC285058, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285058 BINDING SITE, designated SEQ ID:17393, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49767] Another function of GAM7052 is therefore inhibition of LOC285058 (Accession XP_211753.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285058.

[49768] LOC285127 (Accession XP_211771.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC285127 BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by LOC285127, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285127 BINDING SITE, designated SEQ ID:3391, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49769] Another function of GAM7052 is therefore inhibition of LOC285127 (Accession XP_211771.1) . Accordingly, utili-

ties of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285127.

[49770] LOC285166 (Accession XP_211791.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC285166 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285166, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285166 BINDING SITE, designated SEQ ID:7526, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49771] Another function of GAM7052 is therefore inhibition of LOC285166 (Accession XP_211791.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285166.

[49772] LOC285193 (Accession XP_209509.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC285193 BINDING SITE1 and LOC285193 BINDING SITE2 are target binding sites found in untranslated re-

gions of mRNA encoded by LOC285193, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285193 BINDING SITE1 and LOC285193 BINDING SITE2, designated SEQ ID:8008 and SEQ ID:16072 respectively, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49773] Another function of GAM7052 is therefore inhibition of LOC285193 (Accession XP_209509.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285193.

[49774] LOC285231 (Accession XP_211813.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC285231 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285231, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285231 BINDING SITE, designated SEQ ID:13978, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also design-

nated SEQ ID:296.

[49775] Another function of GAM7052 is therefore inhibition of LOC285231 (Accession XP_211813.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285231.

[49776] LOC285281 (Accession XP_211829.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC285281 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC285281, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285281 BINDING SITE, designated SEQ ID:5734, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49777] Another function of GAM7052 is therefore inhibition of LOC285281 (Accession XP_211829.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285281.

[49778] LOC285336 (Accession XP_211850.1) is another

GAM7052 target gene, herein designated TARGET GENE. LOC285336 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285336, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285336 BINDING SITE, designated SEQ ID:14034, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49779] Another function of GAM7052 is therefore inhibition of LOC285336 (Accession XP_211850.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285336.

[49780] LOC285398 (Accession XP_209593.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC285398 BINDING SITE1 and LOC285398 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC285398, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285398

BINDING SITE1 and LOC285398 BINDING SITE2, designated SEQ ID:2258 and SEQ ID:14737 respectively, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49781] Another function of GAM7052 is therefore inhibition of LOC285398 (Accession XP_209593.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285398.

[49782] LOC285456 (Accession XP_209617.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC285456 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC285456, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285456 BINDING SITE, designated SEQ ID:1360, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49783] Another function of GAM7052 is therefore inhibition of LOC285456 (Accession XP_209617.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC285456.

[49784] LOC285510 (Accession XP_209643.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC285510 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285510, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285510 BINDING SITE, designated SEQ ID:6609, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49785] Another function of GAM7052 is therefore inhibition of LOC285510 (Accession XP_209643.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285510.

[49786] LOC285589 (Accession XP_209671.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC285589 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285589, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285589 BINDING SITE, designated SEQ ID:11163, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49787] Another function of GAM7052 is therefore inhibition of LOC285589 (Accession XP_209671.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285589.

[49788] LOC285676 (Accession XP_209718.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC285676 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285676, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285676 BINDING SITE, designated SEQ ID:18681, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49789] Another function of GAM7052 is therefore inhibition of

LOC285676 (Accession XP_209718.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285676.

[49790] LOC285683 (Accession XP_211980.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC285683 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC285683, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285683 BINDING SITE, designated SEQ ID:11222, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49791] Another function of GAM7052 is therefore inhibition of LOC285683 (Accession XP_211980.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285683.

[49792] LOC285722 (Accession XP_211997.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC285722 BINDING SITE is a target binding site found in

the 5' untranslated region of mRNA encoded by LOC285722, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285722 BINDING SITE, designated SEQ ID:4287, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49793] Another function of GAM7052 is therefore inhibition of LOC285722 (Accession XP_211997.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285722.

[49794] LOC285747 (Accession XP_209742.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC285747 BINDING SITE1 and LOC285747 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC285747, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285747 BINDING SITE1 and LOC285747 BINDING SITE2, designated SEQ ID:4189 and SEQ ID:5620 respectively, to the

nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49795] Another function of GAM7052 is therefore inhibition of LOC285747 (Accession XP_209742.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285747.

[49796] LOC285812 (Accession XP_212055.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC285812 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285812, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285812 BINDING SITE, designated SEQ ID:15916, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49797] Another function of GAM7052 is therefore inhibition of LOC285812 (Accession XP_212055.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285812.

[49798] LOC285813 (Accession XP_212036.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC285813 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC285813, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285813 BINDING SITE, designated SEQ ID:12894, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49799] Another function of GAM7052 is therefore inhibition of LOC285813 (Accession XP_212036.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285813.

[49800] LOC285822 (Accession XP_209777.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC285822 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC285822, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC285822 BINDING SITE, designated SEQ ID:649, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49801] Another function of GAM7052 is therefore inhibition of LOC285822 (Accession XP_209777.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285822.

[49802] LOC285830 (Accession XP_212043.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC285830 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC285830, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285830 BINDING SITE, designated SEQ ID:14138, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49803] Another function of GAM7052 is therefore inhibition of LOC285830 (Accession XP_212043.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC285830.

[49804] LOC285843 (Accession XP_212034.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC285843 BINDING SITE1 and LOC285843 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC285843, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285843 BINDING SITE1 and LOC285843 BINDING SITE2, designated SEQ ID:12028 and SEQ ID:3009 respectively, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49805] Another function of GAM7052 is therefore inhibition of LOC285843 (Accession XP_212034.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285843.

[49806] LOC285853 (Accession XP_209779.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC285853 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by

LOC285853, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285853 BINDING SITE, designated SEQ ID:3638, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49807] Another function of GAM7052 is therefore inhibition of LOC285853 (Accession XP_209779.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285853.

[49808] LOC285896 (Accession XP_209806.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC285896 BINDING SITE1 and LOC285896 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC285896, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285896 BINDING SITE1 and LOC285896 BINDING SITE2, designated SEQ ID:13183 and SEQ ID:19678 respectively, to the nucleotide sequence of GAM7052 RNA, herein designated

GAM RNA, also designated SEQ ID:296.

[49809] Another function of GAM7052 is therefore inhibition of LOC285896 (Accession XP_209806.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285896.

[49810] LOC285922 (Accession XP_209822.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC285922 BINDING SITE1 and LOC285922 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC285922, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285922 BINDING SITE1 and LOC285922 BINDING SITE2, designated SEQ ID:13183 and SEQ ID:19678 respectively, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49811] Another function of GAM7052 is therefore inhibition of LOC285922 (Accession XP_209822.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285922.

[49812] LOC285936 (Accession XP_209834.2) is another GAM7052 target gene, herein designated TARGET GENE. LOC285936 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285936, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285936 BINDING SITE, designated SEQ ID:5346, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49813] Another function of GAM7052 is therefore inhibition of LOC285936 (Accession XP_209834.2) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285936.

[49814] LOC285946 (Accession XP_212103.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC285946 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285946, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC285946 BINDING SITE, designated SEQ ID:18469, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49815] Another function of GAM7052 is therefore inhibition of LOC285946 (Accession XP_212103.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285946.

[49816] LOC285952 (Accession XP_209821.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC285952 BINDING SITE1 and LOC285952 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC285952, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285952 BINDING SITE1 and LOC285952 BINDING SITE2, designated SEQ ID:10251 and SEQ ID:13737 respectively, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49817] Another function of GAM7052 is therefore inhibition of LOC285952 (Accession XP_209821.1) . Accordingly, utili-

ties of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285952.

[49818] LOC285961 (Accession XP_209833.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC285961 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285961, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285961 BINDING SITE, designated SEQ ID:4709, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49819] Another function of GAM7052 is therefore inhibition of LOC285961 (Accession XP_209833.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285961.

[49820] LOC285972 (Accession XP_212105.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC285972 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by

LOC285972, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285972 BINDING SITE, designated SEQ ID:1250, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49821] Another function of GAM7052 is therefore inhibition of LOC285972 (Accession XP_212105.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285972.

[49822] LOC285981 (Accession XP_212114.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC285981 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC285981, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285981 BINDING SITE, designated SEQ ID:9691, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49823] Another function of GAM7052 is therefore inhibition of LOC285981 (Accession XP_212114.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285981.

[49824] LOC285989 (Accession XP_212111.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC285989 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285989, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285989 BINDING SITE, designated SEQ ID:9996, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49825] Another function of GAM7052 is therefore inhibition of LOC285989 (Accession XP_212111.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285989.

[49826] LOC285999 (Accession XP_212120.1) is another GAM7052 target gene, herein designated TARGET GENE.

LOC285999 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285999, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285999 BINDING SITE, designated SEQ ID:14823, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49827] Another function of GAM7052 is therefore inhibition of LOC285999 (Accession XP_212120.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285999.

[49828] LOC286030 (Accession XP_209868.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC286030 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC286030, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286030 BINDING SITE, designated SEQ ID:8761, to the nucleotide sequence of

GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49829] Another function of GAM7052 is therefore inhibition of LOC286030 (Accession XP_209868.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286030.

[49830] LOC286039 (Accession XP_209873.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC286039 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC286039, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286039 BINDING SITE, designated SEQ ID:4778, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49831] Another function of GAM7052 is therefore inhibition of LOC286039 (Accession XP_209873.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286039.

[49832] LOC286052 (Accession XP_212152.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC286052 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286052, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286052 BINDING SITE, designated SEQ ID:12351, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49833] Another function of GAM7052 is therefore inhibition of LOC286052 (Accession XP_212152.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286052.

[49834] LOC286059 (Accession XP_212156.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC286059 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286059, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC286059 BINDING SITE, designated SEQ ID:1551, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49835] Another function of GAM7052 is therefore inhibition of LOC286059 (Accession XP_212156.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286059.

[49836] LOC286077 (Accession XP_209892.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC286077 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286077, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286077 BINDING SITE, designated SEQ ID:16730, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49837] Another function of GAM7052 is therefore inhibition of LOC286077 (Accession XP_209892.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC286077.

[49838] LOC286078 (Accession XP_212163.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC286078 BINDING SITE1 through LOC286078 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC286078, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286078 BINDING SITE1 through LOC286078 BINDING SITE3, designated SEQ ID:8761, SEQ ID:18097 and SEQ ID:7215 respectively, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49839] Another function of GAM7052 is therefore inhibition of LOC286078 (Accession XP_212163.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286078.

[49840] LOC286170 (Accession XP_212211.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC286170 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by

LOC286170, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286170 BINDING SITE, designated SEQ ID:20073, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49841] Another function of GAM7052 is therefore inhibition of LOC286170 (Accession XP_212211.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286170.

[49842] LOC286215 (Accession XP_212228.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC286215 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC286215, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286215 BINDING SITE, designated SEQ ID:1985, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49843] Another function of GAM7052 is therefore inhibition of LOC286215 (Accession XP_212228.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286215.

[49844] LOC286218 (Accession XP_212235.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC286218 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286218, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286218 BINDING SITE, designated SEQ ID:4345, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49845] Another function of GAM7052 is therefore inhibition of LOC286218 (Accession XP_212235.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286218.

[49846] LOC286235 (Accession XP_212238.1) is another GAM7052 target gene, herein designated TARGET GENE.

LOC286235 BINDING SITE1 and LOC286235 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC286235, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286235 BINDING SITE1 and LOC286235 BINDING SITE2, designated SEQ ID:7295 and SEQ ID:8806 respectively, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49847] Another function of GAM7052 is therefore inhibition of LOC286235 (Accession XP_212238.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286235.

[49848] LOC286237 (Accession XP_212241.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC286237 BINDING SITE1 and LOC286237 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC286237, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286237

BINDING SITE1 and LOC286237 BINDING SITE2, designated SEQ ID:8806 and SEQ ID:7295 respectively, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49849] Another function of GAM7052 is therefore inhibition of LOC286237 (Accession XP_212241.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286237.

[49850] LOC286245 (Accession XP_212244.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC286245 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC286245, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286245 BINDING SITE, designated SEQ ID:10128, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49851] Another function of GAM7052 is therefore inhibition of LOC286245 (Accession XP_212244.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC286245.

[49852] LOC286341 (Accession XP_212278.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC286341 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286341, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286341 BINDING SITE, designated SEQ ID:2204, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49853] Another function of GAM7052 is therefore inhibition of LOC286341 (Accession XP_212278.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286341.

[49854] LOC286354 (Accession XP_212286.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC286354 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC286354, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286354 BINDING SITE, designated SEQ ID:10895, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49855] Another function of GAM7052 is therefore inhibition of LOC286354 (Accession XP_212286.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286354.

[49856] LOC286381 (Accession XP_212298.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC286381 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286381, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286381 BINDING SITE, designated SEQ ID:15760, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49857] Another function of GAM7052 is therefore inhibition of

LOC286381 (Accession XP_212298.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286381.

[49858] LOC286395 (Accession XP_212308.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC286395 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC286395, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286395 BINDING SITE, designated SEQ ID:15494, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49859] Another function of GAM7052 is therefore inhibition of LOC286395 (Accession XP_212308.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286395.

[49860] LOC286401 (Accession XP_212310.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC286401 BINDING SITE is a target binding site found in

the 5' untranslated region of mRNA encoded by LOC286401, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286401 BINDING SITE, designated SEQ ID:6157, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49861] Another function of GAM7052 is therefore inhibition of LOC286401 (Accession XP_212310.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286401.

[49862] LOC286467 (Accession XP_210063.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC286467 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286467, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286467 BINDING SITE, designated SEQ ID:16885, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also design-

nated SEQ ID:296.

[49863] Another function of GAM7052 is therefore inhibition of LOC286467 (Accession XP_210063.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286467.

[49864] LOC286553 (Accession XP_212340.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC286553 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286553, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286553 BINDING SITE, designated SEQ ID:12740, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49865] Another function of GAM7052 is therefore inhibition of LOC286553 (Accession XP_212340.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286553.

[49866] LOC338565 (Accession XP_294653.1) is another

GAM7052 target gene, herein designated TARGET GENE. LOC338565 BINDING SITE1 and LOC338565 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC338565, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338565 BINDING SITE1 and LOC338565 BINDING SITE2, designated SEQ ID:4912 and SEQ ID:13157 respectively, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49867] Another function of GAM7052 is therefore inhibition of LOC338565 (Accession XP_294653.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC338565.

[49868] LOC338575 (Accession XP_290473.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC338575 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC338575, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC338575 BINDING SITE, designated SEQ ID:10830, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49869] Another function of GAM7052 is therefore inhibition of LOC338575 (Accession XP_290473.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC338575.

[49870] LOC338638 (Accession XP_294671.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC338638 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC338638, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338638 BINDING SITE, designated SEQ ID:19998, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49871] Another function of GAM7052 is therefore inhibition of LOC338638 (Accession XP_294671.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC338638.

[49872] LOC338645 (Accession XP_290494.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC338645 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC338645, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338645 BINDING SITE, designated SEQ ID:7837, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49873] Another function of GAM7052 is therefore inhibition of LOC338645 (Accession XP_290494.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC338645.

[49874] LOC338731 (Accession XP_294688.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC338731 BINDING SITE1 and LOC338731 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC338731, corresponding to

target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338731 BINDING SITE1 and LOC338731 BINDING SITE2, designated SEQ ID:17885 and SEQ ID:12023 respectively, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49875] Another function of GAM7052 is therefore inhibition of LOC338731 (Accession XP_294688.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC338731.

[49876] LOC338739 (Accession XP_294690.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC338739 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC338739, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338739 BINDING SITE, designated SEQ ID:16372, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49877] Another function of GAM7052 is therefore inhibition of LOC338739 (Accession XP_294690.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC338739.

[49878] LOC338773 (Accession XP_290570.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC338773 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC338773, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338773 BINDING SITE, designated SEQ ID:18646, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49879] Another function of GAM7052 is therefore inhibition of LOC338773 (Accession XP_290570.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC338773.

[49880] LOC338899 (Accession XP_294740.1) is another GAM7052 target gene, herein designated TARGET GENE.

LOC338899 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC338899, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338899 BINDING SITE, designated SEQ ID:9873, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49881] Another function of GAM7052 is therefore inhibition of LOC338899 (Accession XP_294740.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC338899.

[49882] LOC338923 (Accession XP_294742.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC338923 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC338923, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338923 BINDING SITE, designated SEQ ID:9896, to the nucleotide sequence of

GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49883] Another function of GAM7052 is therefore inhibition of LOC338923 (Accession XP_294742.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC338923.

[49884] LOC339078 (Accession XP_290692.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC339078 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339078, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339078 BINDING SITE, designated SEQ ID:16281, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49885] Another function of GAM7052 is therefore inhibition of LOC339078 (Accession XP_290692.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339078.

[49886] LOC339324 (Accession XP_290838.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC339324 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339324, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339324 BINDING SITE, designated SEQ ID:17237, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49887] Another function of GAM7052 is therefore inhibition of LOC339324 (Accession XP_290838.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339324.

[49888] LOC339448 (Accession XP_290902.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC339448 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339448, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC339448 BINDING SITE, designated SEQ ID:14659, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49889] Another function of GAM7052 is therefore inhibition of LOC339448 (Accession XP_290902.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339448.

[49890] LOC339492 (Accession XP_290919.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC339492 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339492, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339492 BINDING SITE, designated SEQ ID:2858, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49891] Another function of GAM7052 is therefore inhibition of LOC339492 (Accession XP_290919.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC339492.

[49892] LOC339545 (Accession XP_290946.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC339545 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339545, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339545 BINDING SITE, designated SEQ ID:19920, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49893] Another function of GAM7052 is therefore inhibition of LOC339545 (Accession XP_290946.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339545.

[49894] LOC339553 (Accession XP_290949.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC339553 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339553, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339553 BINDING SITE, designated SEQ ID:19920, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49895] Another function of GAM7052 is therefore inhibition of LOC339553 (Accession XP_290949.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339553.

[49896] LOC339600 (Accession XP_295014.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC339600 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339600, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339600 BINDING SITE, designated SEQ ID:10808, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49897] Another function of GAM7052 is therefore inhibition of

LOC339600 (Accession XP_295014.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339600.

[49898] LOC339622 (Accession XP_295016.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC339622 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC339622, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339622 BINDING SITE, designated SEQ ID:1892, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49899] Another function of GAM7052 is therefore inhibition of LOC339622 (Accession XP_295016.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339622.

[49900] LOC339659 (Accession XP_290981.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC339659 BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by LOC339659, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339659 BINDING SITE, designated SEQ ID:19261, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49901] Another function of GAM7052 is therefore inhibition of LOC339659 (Accession XP_290981.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339659.

[49902] LOC339809 (Accession XP_291020.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC339809 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC339809, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339809 BINDING SITE, designated SEQ ID:1251, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also design-

nated SEQ ID:296.

[49903] Another function of GAM7052 is therefore inhibition of LOC339809 (Accession XP_291020.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339809.

[49904] LOC339832 (Accession XP_295079.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC339832 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC339832, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339832 BINDING SITE, designated SEQ ID:14207, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49905] Another function of GAM7052 is therefore inhibition of LOC339832 (Accession XP_295079.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339832.

[49906] LOC339833 (Accession XP_291031.1) is another

GAM7052 target gene, herein designated TARGET GENE. LOC339833 BINDING SITE1 and LOC339833 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC339833, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339833 BINDING SITE1 and LOC339833 BINDING SITE2, designated SEQ ID:18479 and SEQ ID:17916 respectively, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49907] Another function of GAM7052 is therefore inhibition of LOC339833 (Accession XP_291031.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339833.

[49908] LOC339909 (Accession XP_291069.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC339909 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC339909, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC339909 BINDING SITE, designated SEQ ID:9636, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49909] Another function of GAM7052 is therefore inhibition of LOC339909 (Accession XP_291069.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339909.

[49910] LOC340037 (Accession XP_295137.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC340037 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC340037, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340037 BINDING SITE, designated SEQ ID:13456, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49911] Another function of GAM7052 is therefore inhibition of LOC340037 (Accession XP_295137.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC340037.

[49912] LOC340065 (Accession XP_295146.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC340065 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC340065, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340065 BINDING SITE, designated SEQ ID:11211, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49913] Another function of GAM7052 is therefore inhibition of LOC340065 (Accession XP_295146.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340065.

[49914] LOC340109 (Accession XP_295156.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC340109 BINDING SITE1 and LOC340109 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC340109, corresponding to

target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340109 BINDING SITE1 and LOC340109 BINDING SITE2, designated SEQ ID:9847 and SEQ ID:2492 respectively, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49915] Another function of GAM7052 is therefore inhibition of LOC340109 (Accession XP_295156.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340109.

[49916] LOC340138 (Accession XP_291153.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC340138 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC340138, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340138 BINDING SITE, designated SEQ ID:10831, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49917] Another function of GAM7052 is therefore inhibition of LOC340138 (Accession XP_291153.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340138.

[49918] LOC340156 (Accession XP_291158.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC340156 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC340156, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340156 BINDING SITE, designated SEQ ID:765, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49919] Another function of GAM7052 is therefore inhibition of LOC340156 (Accession XP_291158.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340156.

[49920] LOC340259 (Accession XP_295190.1) is another GAM7052 target gene, herein designated TARGET GENE.

LOC340259 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC340259, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340259 BINDING SITE, designated SEQ ID:12172, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49921] Another function of GAM7052 is therefore inhibition of LOC340259 (Accession XP_295190.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340259.

[49922] LOC340390 (Accession XP_291269.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC340390 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC340390, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340390 BINDING SITE, designated SEQ ID:16887, to the nucleotide sequence of

GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49923] Another function of GAM7052 is therefore inhibition of LOC340390 (Accession XP_291269.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340390.

[49924] LOC340408 (Accession XP_291274.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC340408 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC340408, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340408 BINDING SITE, designated SEQ ID:8761, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49925] Another function of GAM7052 is therefore inhibition of LOC340408 (Accession XP_291274.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340408.

[49926] LOC340528 (Accession XP_295268.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC340528 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC340528, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340528 BINDING SITE, designated SEQ ID:9710, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49927] Another function of GAM7052 is therefore inhibition of LOC340528 (Accession XP_295268.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340528.

[49928] LOC340547 (Accession XP_291331.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC340547 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC340547, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC340547 BINDING SITE, designated SEQ ID:13947, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49929] Another function of GAM7052 is therefore inhibition of LOC340547 (Accession XP_291331.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340547.

[49930] LOC342926 (Accession XP_292790.2) is another GAM7052 target gene, herein designated TARGET GENE. LOC342926 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC342926, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC342926 BINDING SITE, designated SEQ ID:4809, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49931] Another function of GAM7052 is therefore inhibition of LOC342926 (Accession XP_292790.2) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC342926.

[49932] LOC344805 (Accession XP_293599.2) is another GAM7052 target gene, herein designated TARGET GENE. LOC344805 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC344805, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC344805 BINDING SITE, designated SEQ ID:10624, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49933] Another function of GAM7052 is therefore inhibition of LOC344805 (Accession XP_293599.2) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC344805.

[49934] LOC345275 (Accession NP_835236.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC345275 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by LOC345275, corresponding to a target

binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC345275 BINDING SITE, designated SEQ ID:9847, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49935] Another function of GAM7052 is therefore inhibition of LOC345275 (Accession NP_835236.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC345275.

[49936] LOC347803 (Accession XP_302604.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC347803 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC347803, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC347803 BINDING SITE, designated SEQ ID:19575, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49937] Another function of GAM7052 is therefore inhibition of

LOC347803 (Accession XP_302604.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC347803.

[49938] LOC347905 (Accession XP_302624.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC347905 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC347905, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC347905 BINDING SITE, designated SEQ ID:7074, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49939] Another function of GAM7052 is therefore inhibition of LOC347905 (Accession XP_302624.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC347905.

[49940] LOC348075 (Accession XP_302653.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC348075 BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by LOC348075, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348075 BINDING SITE, designated SEQ ID:12676, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49941] Another function of GAM7052 is therefore inhibition of LOC348075 (Accession XP_302653.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348075.

[49942] LOC348094 (Accession XP_300615.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC348094 BINDING SITE1 and LOC348094 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC348094, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348094 BINDING SITE1 and LOC348094 BINDING SITE2, designated SEQ ID:16360 and SEQ ID:16871 respectively, to the

nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49943] Another function of GAM7052 is therefore inhibition of LOC348094 (Accession XP_300615.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348094.

[49944] LOC348208 (Accession XP_302683.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC348208 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC348208, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348208 BINDING SITE, designated SEQ ID:17011, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49945] Another function of GAM7052 is therefore inhibition of LOC348208 (Accession XP_302683.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348208.

[49946] LOC348235 (Accession XP_300670.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC348235 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC348235, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348235 BINDING SITE, designated SEQ ID:4503, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49947] Another function of GAM7052 is therefore inhibition of LOC348235 (Accession XP_300670.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348235.

[49948] LOC348262 (Accession XP_300683.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC348262 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC348262, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC348262 BINDING SITE, designated SEQ ID:5537, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49949] Another function of GAM7052 is therefore inhibition of LOC348262 (Accession XP_300683.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348262.

[49950] LOC348396 (Accession XP_300729.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC348396 BINDING SITE1 and LOC348396 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC348396, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348396 BINDING SITE1 and LOC348396 BINDING SITE2, designated SEQ ID:2104 and SEQ ID:10170 respectively, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49951] Another function of GAM7052 is therefore inhibition of LOC348396 (Accession XP_300729.1) . Accordingly, utili-

ties of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348396.

[49952] LOC348402 (Accession XP_300730.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC348402 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC348402, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348402 BINDING SITE, designated SEQ ID:2858, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49953] Another function of GAM7052 is therefore inhibition of LOC348402 (Accession XP_300730.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348402.

[49954] LOC348428 (Accession XP_302753.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC348428 BINDING SITE1 through LOC348428 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC348428, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the com-

plementarity of the nucleotide sequences of LOC348428 BINDING SITE1 through LOC348428 BINDING SITE3, designated SEQ ID:2400, SEQ ID:1361 and SEQ ID:7896 respectively, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49955] Another function of GAM7052 is therefore inhibition of LOC348428 (Accession XP_302753.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348428.

[49956] LOC348460 (Accession XP_300743.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC348460 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC348460, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348460 BINDING SITE, designated SEQ ID:13251, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49957] Another function of GAM7052 is therefore inhibition of LOC348460 (Accession XP_300743.1) . Accordingly, utili-

ties of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348460.

[49958] LOC348492 (Accession XP_300758.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC348492 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC348492, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348492 BINDING SITE, designated SEQ ID:19920, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49959] Another function of GAM7052 is therefore inhibition of LOC348492 (Accession XP_300758.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348492.

[49960] LOC348567 (Accession XP_300378.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC348567 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by

LOC348567, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348567 BINDING SITE, designated SEQ ID:5965, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49961] Another function of GAM7052 is therefore inhibition of LOC348567 (Accession XP_300378.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348567.

[49962] LOC348699 (Accession XP_300816.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC348699 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC348699, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348699 BINDING SITE, designated SEQ ID:13715, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49963] Another function of GAM7052 is therefore inhibition of LOC348699 (Accession XP_300816.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348699.

[49964] LOC348797 (Accession XP_302888.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC348797 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC348797, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348797 BINDING SITE, designated SEQ ID:7313, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49965] Another function of GAM7052 is therefore inhibition of LOC348797 (Accession XP_302888.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348797.

[49966] LOC348798 (Accession XP_300845.1) is another GAM7052 target gene, herein designated TARGET GENE.

LOC348798 BINDING SITE1 and LOC348798 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC348798, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348798 BINDING SITE1 and LOC348798 BINDING SITE2, designated SEQ ID:3079 and SEQ ID:12640 respectively, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49967] Another function of GAM7052 is therefore inhibition of LOC348798 (Accession XP_300845.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348798.

[49968] LOC348888 (Accession XP_302910.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC348888 BINDING SITE1 and LOC348888 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC348888, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348888

BINDING SITE1 and LOC348888 BINDING SITE2, designated SEQ ID:473 and SEQ ID:5196 respectively, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49969] Another function of GAM7052 is therefore inhibition of LOC348888 (Accession XP_302910.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348888.

[49970] LOC348947 (Accession XP_302929.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC348947 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC348947, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348947 BINDING SITE, designated SEQ ID:1705, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49971] Another function of GAM7052 is therefore inhibition of LOC348947 (Accession XP_302929.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC348947.

[49972] LOC349075 (Accession XP_300932.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC349075 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC349075, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349075 BINDING SITE, designated SEQ ID:17749, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49973] Another function of GAM7052 is therefore inhibition of LOC349075 (Accession XP_300932.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349075.

[49974] LOC349170 (Accession XP_300969.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC349170 BINDING SITE1 through LOC349170 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC349170, corresponding to

target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349170 BINDING SITE1 through LOC349170 BINDING SITE3, designated SEQ ID:13113, SEQ ID:5467 and SEQ ID:11095 respectively, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49975] Another function of GAM7052 is therefore inhibition of LOC349170 (Accession XP_300969.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349170.

[49976] LOC349251 (Accession XP_300251.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC349251 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC349251, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349251 BINDING SITE, designated SEQ ID:3623, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49977] Another function of GAM7052 is therefore inhibition of LOC349251 (Accession XP_300251.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349251.

[49978] LOC349261 (Accession XP_300998.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC349261 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC349261, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349261 BINDING SITE, designated SEQ ID:8011, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49979] Another function of GAM7052 is therefore inhibition of LOC349261 (Accession XP_300998.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349261.

[49980] LOC349272 (Accession XP_303013.1) is another GAM7052 target gene, herein designated TARGET GENE.

LOC349272 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC349272, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349272 BINDING SITE, designated SEQ ID:16887, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49981] Another function of GAM7052 is therefore inhibition of LOC349272 (Accession XP_303013.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349272.

[49982] LOC349279 (Accession XP_303015.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC349279 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC349279, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349279 BINDING SITE, designated SEQ ID:16887, to the nucleotide sequence of

GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49983] Another function of GAM7052 is therefore inhibition of LOC349279 (Accession XP_303015.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349279.

[49984] LOC349301 (Accession XP_303022.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC349301 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC349301, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349301 BINDING SITE, designated SEQ ID:16887, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49985] Another function of GAM7052 is therefore inhibition of LOC349301 (Accession XP_303022.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349301.

[49986] LOC349305 (Accession XP_301019.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC349305 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC349305, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349305 BINDING SITE, designated SEQ ID:5500, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49987] Another function of GAM7052 is therefore inhibition of LOC349305 (Accession XP_301019.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349305.

[49988] LOC349306 (Accession XP_303023.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC349306 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC349306, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC349306 BINDING SITE, designated SEQ ID:16887, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49989] Another function of GAM7052 is therefore inhibition of LOC349306 (Accession XP_303023.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349306.

[49990] LOC349360 (Accession XP_088528.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC349360 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC349360, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349360 BINDING SITE, designated SEQ ID:16885, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49991] Another function of GAM7052 is therefore inhibition of LOC349360 (Accession XP_088528.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC349360.

[49992] LOC349408 (Accession XP_303044.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC349408 BINDING SITE1 and LOC349408 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC349408, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349408 BINDING SITE1 and LOC349408 BINDING SITE2, designated SEQ ID:19208 and SEQ ID:15314 respectively, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49993] Another function of GAM7052 is therefore inhibition of LOC349408 (Accession XP_303044.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349408.

[49994] LOC349440 (Accession XP_300513.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC349440 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by

LOC349440, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349440 BINDING SITE, designated SEQ ID:3639, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49995] Another function of GAM7052 is therefore inhibition of LOC349440 (Accession XP_300513.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349440.

[49996] LOC51186 (Accession NP_057387.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC51186 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC51186, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC51186 BINDING SITE, designated SEQ ID:11729, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49997] Another function of GAM7052 is therefore inhibition of

LOC51186 (Accession NP_057387.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC51186.

[49998] LOC57146 (Accession NP_065155.2) is another GAM7052 target gene, herein designated TARGET GENE. LOC57146 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC57146, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC57146 BINDING SITE, designated SEQ ID:1187, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[49999] Another function of GAM7052 is therefore inhibition of LOC57146 (Accession NP_065155.2) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC57146.

[50000] LOC90408 (Accession XP_031517.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC90408 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC90408, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC90408 BINDING SITE, designated SEQ ID:18503, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50001] Another function of GAM7052 is therefore inhibition of LOC90408 (Accession XP_031517.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC90408.

[50002] LOC90806 (Accession NP_653168.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC90806 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC90806, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC90806 BINDING SITE, designated SEQ ID:16793, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50003] Another function of GAM7052 is therefore inhibition of LOC90806 (Accession NP_653168.1) . Accordingly, utili-

ties of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC90806.

[50004] LOC91056 (Accession NP_612377.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC91056 BINDING SITE1 and LOC91056 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by LOC91056, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC91056 BINDING SITE1 and LOC91056 BINDING SITE2, designated SEQ ID:4090 and SEQ ID:13610 respectively, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50005] Another function of GAM7052 is therefore inhibition of LOC91056 (Accession NP_612377.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC91056.

[50006] LOC91115 (Accession XP_036218.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC91115 BINDING SITE1 and LOC91115 BINDING SITE2 are target

binding sites found in untranslated regions of mRNA encoded by LOC91115, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC91115 BINDING SITE1 and LOC91115 BINDING SITE2, designated SEQ ID:4889 and SEQ ID:12496 respectively, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50007] Another function of GAM7052 is therefore inhibition of LOC91115 (Accession XP_036218.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC91115.

[50008] LOC91250 (Accession XP_037135.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC91250 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC91250, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC91250 BINDING SITE, designated SEQ ID:6792, to the nucleotide sequence of GAM7052 RNA, herein designated

GAM RNA, also designated SEQ ID:296.

- [50009] Another function of GAM7052 is therefore inhibition of LOC91250 (Accession XP_037135.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC91250.
- [50010] LOC91549 (Accession XP_039115.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC91549 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC91549, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC91549 BINDING SITE, designated SEQ ID:7060, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.
- [50011] Another function of GAM7052 is therefore inhibition of LOC91549 (Accession XP_039115.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC91549.
- [50012] LOC92148 (Accession XP_043160.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC92148

BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC92148, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC92148 BINDING SITE, designated SEQ ID:14963, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50013] Another function of GAM7052 is therefore inhibition of LOC92148 (Accession XP_043160.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC92148.

[50014] LOC92597 (Accession NP_775739.1) is another GAM7052 target gene, herein designated TARGET GENE. LOC92597 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC92597, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC92597 BINDING SITE, designated SEQ ID:9812, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50015] Another function of GAM7052 is therefore inhibition of LOC92597 (Accession NP_775739.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC92597.

[50016] LOC93349 (Accession NP_612411.2) is another GAM7052 target gene, herein designated TARGET GENE. LOC93349 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC93349, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC93349 BINDING SITE, designated SEQ ID:7858, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50017] Another function of GAM7052 is therefore inhibition of LOC93349 (Accession NP_612411.2) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC93349.

[50018] Lanosterol synthase (2,3-oxidosqualene-lanosterol cyclase) (LSS, Accession NP_002331.2) is another GAM7052 target gene, herein designated TARGET GENE. LSS BIND-

ING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LSS, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LSS BINDING SITE, designated SEQ ID:13480, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50019] Another function of GAM7052 is therefore inhibition of Lanosterol synthase (2,3-oxidosqualene-lanosterol cyclase) (LSS, Accession NP_002331.2) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LSS.

[50020] Male germ cell-associated kinase (MAK, Accession NP_005897.1) is another GAM7052 target gene, herein designated TARGET GENE. MAK BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MAK, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MAK BINDING SITE, designated SEQ ID:7895, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ

ID:296.

[50021] Another function of GAM7052 is therefore inhibition of Male germ cell-associated kinase (MAK, Accession NP_005897.1), a gene which plays an important role in spermatogenesis. Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MAK.

[50022] The function of MAK and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1. Mannosidase, beta a, lysosomal-like (MANBAL, Accession NP_071360.1) is another GAM7052 target gene, herein designated TARGET GENE. MANBAL BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MANBAL, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MANBAL BINDING SITE, designated SEQ ID:12674, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50023] Another function of GAM7052 is therefore inhibition of Mannosidase, beta a, lysosomal-like (MANBAL, Accession

NP_071360.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MANBAL.

[50024] MAPA (Accession NP_660299.1) is another GAM7052 target gene, herein designated TARGET GENE. MAPA BINDING SITE1 and MAPA BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by MAPA, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MAPA BINDING SITE1 and MAPA BINDING SITE2, designated SEQ ID:2128 and SEQ ID:9966 respectively, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50025] Another function of GAM7052 is therefore inhibition of MAPA (Accession NP_660299.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MAPA.

[50026] Mads box transcription enhancer factor 2, polypeptide a (myocyte enhancer factor 2a) (MEF2A, Accession NP_005578.1) is another GAM7052 target gene, herein designated TARGET GENE. MEF2A BINDING SITE is a target binding site found in the 5` untranslated region of mRNA

encoded by MEF2A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MEF2A BINDING SITE, designated SEQ ID:12527, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50027] Another function of GAM7052 is therefore inhibition of Mads box transcription enhancer factor 2, polypeptide a (myocyte enhancer factor 2a) (MEF2A, Accession NP_005578.1), a gene which binds a consensus sequence that regulates transcription. Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MEF2A.

[50028] The function of MEF2A and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM130.1.Mediterranean fever (MEFV, Accession NP_000234.1) is another GAM7052 target gene, herein designated TARGET GENE. MEFV BINDING SITE1 and MEFV BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by MEFV, corresponding to target binding sites such as BINDING SITE I, BINDING

SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MEFV BINDING SITE1 and MEFV BINDING SITE2, designated SEQ ID:12378 and SEQ ID:3905 respectively, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50029] Another function of GAM7052 is therefore inhibition of Mediterranean fever (MEFV, Accession NP_000234.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MEFV.

[50030] Antigen p97 (melanoma associated) identified by monoclonal antibodies 133.2 and 96.5 (MFI2, Accession NP_201573.1) is another GAM7052 target gene, herein designated TARGET GENE. MFI2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by MFI2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MFI2 BINDING SITE, designated SEQ ID:19559, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50031] Another function of GAM7052 is therefore inhibition of Antigen p97 (melanoma associated) identified by monoclonal antibodies 133.2 and 96.5 (MFI2, Accession NP_201573.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MFI2.

[50032] MFTC (Accession NP_110407.2) is another GAM7052 target gene, herein designated TARGET GENE. MFTC BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MFTC, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MFTC BINDING SITE, designated SEQ ID:8527, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50033] Another function of GAM7052 is therefore inhibition of MFTC (Accession NP_110407.2) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MFTC.

[50034] MGC11102 (Accession NP_115701.2) is another GAM7052 target gene, herein designated TARGET GENE. MGC11102 BINDING SITE is a target binding site found in the 3' un-

translated region of mRNA encoded by MGC11102, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC11102 BINDING SITE, designated SEQ ID:8801, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50035] Another function of GAM7052 is therefore inhibition of MGC11102 (Accession NP_115701.2) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC11102.

[50036] MGC12518 (Accession NP_291026.1) is another GAM7052 target gene, herein designated TARGET GENE. MGC12518 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC12518, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC12518 BINDING SITE, designated SEQ ID:16735, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50037] Another function of GAM7052 is therefore inhibition of

MGC12518 (Accession NP_291026.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC12518.

[50038] MGC13071 (Accession NP_116078.2) is another GAM7052 target gene, herein designated TARGET GENE. MGC13071 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC13071, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC13071 BINDING SITE, designated SEQ ID:20118, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50039] Another function of GAM7052 is therefore inhibition of MGC13071 (Accession NP_116078.2) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC13071.

[50040] MGC13204 (Accession NP_113653.1) is another GAM7052 target gene, herein designated TARGET GENE. MGC13204 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC13204, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC13204 BINDING SITE, designated SEQ ID:10962, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50041] Another function of GAM7052 is therefore inhibition of MGC13204 (Accession NP_113653.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC13204.

[50042] MGC14289 (Accession NP_542391.1) is another GAM7052 target gene, herein designated TARGET GENE. MGC14289 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC14289, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC14289 BINDING SITE, designated SEQ ID:7116, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50043] Another function of GAM7052 is therefore inhibition of MGC14289 (Accession NP_542391.1) . Accordingly, utili-

ties of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC14289.

[50044] MGC24180 (Accession NP_689565.1) is another GAM7052 target gene, herein designated TARGET GENE. MGC24180 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MGC24180, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC24180 BINDING SITE, designated SEQ ID:7412, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50045] Another function of GAM7052 is therefore inhibition of MGC24180 (Accession NP_689565.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC24180.

[50046] MGC27345 (Accession XP_300964.1) is another GAM7052 target gene, herein designated TARGET GENE. MGC27345 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by MGC27345, corresponding to a target binding site

such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC27345 BINDING SITE, designated SEQ ID:7770, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50047] Another function of GAM7052 is therefore inhibition of MGC27345 (Accession XP_300964.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC27345.

[50048] MGC29649 (Accession NP_776171.1) is another GAM7052 target gene, herein designated TARGET GENE. MGC29649 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MGC29649, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC29649 BINDING SITE, designated SEQ ID:2841, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50049] Another function of GAM7052 is therefore inhibition of MGC29649 (Accession NP_776171.1) . Accordingly, utili-

ties of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC29649.

[50050] MGC29891 (Accession NP_653219.1) is another GAM7052 target gene, herein designated TARGET GENE. MGC29891 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC29891, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC29891 BINDING SITE, designated SEQ ID:6192, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50051] Another function of GAM7052 is therefore inhibition of MGC29891 (Accession NP_653219.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC29891.

[50052] MGC29898 (Accession NP_659485.1) is another GAM7052 target gene, herein designated TARGET GENE. MGC29898 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC29898, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC29898 BINDING SITE, designated SEQ ID:8105, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50053] Another function of GAM7052 is therefore inhibition of MGC29898 (Accession NP_659485.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC29898.

[50054] MGC3207 (Accession NP_115661.1) is another GAM7052 target gene, herein designated TARGET GENE. MGC3207 BINDING SITE1 and MGC3207 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by MGC3207, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC3207 BINDING SITE1 and MGC3207 BINDING SITE2, designated SEQ ID:16723 and SEQ ID:13361 respectively, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50055] Another function of GAM7052 is therefore inhibition of

MGC3207 (Accession NP_115661.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC3207.

[50056] MGC33338 (Accession NP_689579.2) is another GAM7052 target gene, herein designated TARGET GENE. MGC33338 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC33338, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC33338 BINDING SITE, designated SEQ ID:9435, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50057] Another function of GAM7052 is therefore inhibition of MGC33338 (Accession NP_689579.2) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC33338.

[50058] MGC33637 (Accession NP_689809.1) is another GAM7052 target gene, herein designated TARGET GENE. MGC33637 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC33637, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC33637 BINDING SITE, designated SEQ ID:14742, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50059] Another function of GAM7052 is therefore inhibition of MGC33637 (Accession NP_689809.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC33637.

[50060] MGC34132 (Accession XP_291029.1) is another GAM7052 target gene, herein designated TARGET GENE. MGC34132 BINDING SITE1 and MGC34132 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by MGC34132, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC34132 BINDING SITE1 and MGC34132 BINDING SITE2, designated SEQ ID:7217 and SEQ ID:18011 respectively, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50061] Another function of GAM7052 is therefore inhibition of MGC34132 (Accession XP_291029.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC34132.

[50062] MGC35048 (Accession NP_694940.1) is another GAM7052 target gene, herein designated TARGET GENE. MGC35048 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by MGC35048, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC35048 BINDING SITE, designated SEQ ID:16147, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50063] Another function of GAM7052 is therefore inhibition of MGC35048 (Accession NP_694940.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC35048.

[50064] MGC35468 (Accession NP_694976.1) is another GAM7052 target gene, herein designated TARGET GENE. MGC35468 BINDING SITE is a target binding site found in the 3` un-

translated region of mRNA encoded by MGC35468, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC35468 BINDING SITE, designated SEQ ID:17258, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50065] Another function of GAM7052 is therefore inhibition of MGC35468 (Accession NP_694976.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC35468.

[50066] MGC40168 (Accession NP_714920.1) is another GAM7052 target gene, herein designated TARGET GENE. MGC40168 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by MGC40168, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC40168 BINDING SITE, designated SEQ ID:6366, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50067] Another function of GAM7052 is therefore inhibition of

MGC40168 (Accession NP_714920.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC40168.

[50068] MGC40579 (Accession NP_689989.1) is another GAM7052 target gene, herein designated TARGET GENE. MGC40579 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC40579, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC40579 BINDING SITE, designated SEQ ID:18904, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50069] Another function of GAM7052 is therefore inhibition of MGC40579 (Accession NP_689989.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC40579.

[50070] MGC43122 (Accession NP_775784.1) is another GAM7052 target gene, herein designated TARGET GENE. MGC43122 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC43122, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC43122 BINDING SITE, designated SEQ ID:19043, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50071] Another function of GAM7052 is therefore inhibition of MGC43122 (Accession NP_775784.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC43122.

[50072] MGC46336 (Accession XP_290712.1) is another GAM7052 target gene, herein designated TARGET GENE. MGC46336 BINDING SITE1 through MGC46336 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by MGC46336, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC46336 BINDING SITE1 through MGC46336 BINDING SITE3, designated SEQ ID:4916, SEQ ID:10377 and SEQ ID:5284 respectively, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50073] Another function of GAM7052 is therefore inhibition of MGC46336 (Accession XP_290712.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC46336.

[50074] MGC46732 (Accession NP_714925.1) is another GAM7052 target gene, herein designated TARGET GENE. MGC46732 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC46732, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC46732 BINDING SITE, designated SEQ ID:5120, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50075] Another function of GAM7052 is therefore inhibition of MGC46732 (Accession NP_714925.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC46732.

[50076] MGC50452 (Accession NP_775733.1) is another GAM7052 target gene, herein designated TARGET GENE. MGC50452 BINDING SITE is a target binding site found in the 3' un-

translated region of mRNA encoded by MGC50452, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC50452 BINDING SITE, designated SEQ ID:6275, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50077] Another function of GAM7052 is therefore inhibition of MGC50452 (Accession NP_775733.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC50452.

[50078] MGC50559 (Accession NP_776163.1) is another GAM7052 target gene, herein designated TARGET GENE. MGC50559 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC50559, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC50559 BINDING SITE, designated SEQ ID:19560, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50079] Another function of GAM7052 is therefore inhibition of

MGC50559 (Accession NP_776163.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC50559.

[50080] MGRN1 (Accession XP_048119.4) is another GAM7052 target gene, herein designated TARGET GENE. MGRN1 BINDING SITE1 and MGRN1 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by MGRN1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGRN1 BINDING SITE1 and MGRN1 BINDING SITE2, designated SEQ ID:16263 and SEQ ID:14616 respectively, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50081] Another function of GAM7052 is therefore inhibition of MGRN1 (Accession XP_048119.4) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGRN1.

[50082] Melan-a (MLANA, Accession NP_005502.1) is another GAM7052 target gene, herein designated TARGET GENE. MLANA BINDING SITE is a target binding site found in the

3' untranslated region of mRNA encoded by MLANA, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MLANA BINDING SITE, designated SEQ ID:5470, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50083] Another function of GAM7052 is therefore inhibition of Melan-a (MLANA, Accession NP_005502.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MLANA.

[50084] Melanoma-derived leucine zipper, extra-nuclear factor (MLZE, Accession NP_113603.1) is another GAM7052 target gene, herein designated TARGET GENE. MLZE BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MLZE, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MLZE BINDING SITE, designated SEQ ID:18046, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50085] Another function of GAM7052 is therefore inhibition of Melanoma-derived leucine zipper, extra-nuclear factor (MLZE, Accession NP_113603.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MLZE.

[50086] Matrix metalloproteinase-like 1 (MMPL1, Accession NP_004133.1) is another GAM7052 target gene, herein designated TARGET GENE. MMPL1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MMPL1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MMPL1 BINDING SITE, designated SEQ ID:10936, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50087] Another function of GAM7052 is therefore inhibition of Matrix metalloproteinase-like 1 (MMPL1, Accession NP_004133.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MMPL1.

[50088] moblak (Accession NP_570719.1) is another GAM7052 target gene, herein designated TARGET GENE. moblak

BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by moblak, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of moblak BINDING SITE, designated SEQ ID:9025, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50089] Another function of GAM7052 is therefore inhibition of moblak (Accession NP_570719.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with moblak.

[50090] Molybdenum cofactor synthesis 1 (MOCS1, Accession NP_005934.2) is another GAM7052 target gene, herein designated TARGET GENE. MOCS1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by MOCS1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MOCS1 BINDING SITE, designated SEQ ID:16709, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50091] Another function of GAM7052 is therefore inhibition of Molybdenum cofactor synthesis 1 (MOCS1, Accession NP_005934.2) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MOCS1.

[50092] Molybdenum cofactor synthesis 1 (MOCS1, Accession NP_620306.1) is another GAM7052 target gene, herein designated TARGET GENE. MOCS1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by MOCS1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MOCS1 BINDING SITE, designated SEQ ID:16709, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50093] Another function of GAM7052 is therefore inhibition of Molybdenum cofactor synthesis 1 (MOCS1, Accession NP_620306.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MOCS1.

[50094] Molybdenum cofactor synthesis 1 (MOCS1, Accession NP_005933.1) is another GAM7052 target gene, herein

designated TARGET GENE. MOCS1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by MOCS1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MOCS1 BINDING SITE, designated SEQ ID:16709, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50095] Another function of GAM7052 is therefore inhibition of Molybdenum cofactor synthesis 1 (MOCS1, Accession NP_005933.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MOCS1.

[50096] Molybdenum cofactor synthesis 3 (MOCS3, Accession NP_055299.1) is another GAM7052 target gene, herein designated TARGET GENE. MOCS3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MOCS3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MOCS3 BINDING SITE, designated SEQ ID:12388, to the nucleotide sequence of GAM7052

RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50097] Another function of GAM7052 is therefore inhibition of Molybdenum cofactor synthesis 3 (MOCS3, Accession NP_055299.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MOCS3.

[50098] Myeloproliferative leukemia virus oncogene (MPL, Accession NP_005364.1) is another GAM7052 target gene, herein designated TARGET GENE. MPL BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MPL, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MPL BINDING SITE, designated SEQ ID:19484, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50099] Another function of GAM7052 is therefore inhibition of Myeloproliferative leukemia virus oncogene (MPL, Accession NP_005364.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MPL.

[50100] Mitochondrial ribosomal protein I38 (MRPL38, Accession NP_115867.1) is another GAM7052 target gene, herein designated TARGET GENE. MRPL38 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MRPL38, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MRPL38 BINDING SITE, designated SEQ ID:15457, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50101] Another function of GAM7052 is therefore inhibition of Mitochondrial ribosomal protein I38 (MRPL38, Accession NP_115867.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MRPL38.

[50102] Mitochondrial ribosomal protein I44 (MRPL44, Accession NP_075066.1) is another GAM7052 target gene, herein designated TARGET GENE. MRPL44 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MRPL44, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the comple-

mentarity of the nucleotide sequences of MRPL44 BINDING SITE, designated SEQ ID:8317, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50103] Another function of GAM7052 is therefore inhibition of Mitochondrial ribosomal protein l44 (MRPL44, Accession NP_075066.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MRPL44.

[50104] Mitochondrial ribosomal protein l49 (MRPL49, Accession NP_004918.1) is another GAM7052 target gene, herein designated TARGET GENE. MRPL49 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MRPL49, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MRPL49 BINDING SITE, designated SEQ ID:13740, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50105] Another function of GAM7052 is therefore inhibition of Mitochondrial ribosomal protein l49 (MRPL49, Accession NP_004918.1) . Accordingly, utilities of GAM7052 include

diagnosis, prevention and treatment of diseases and clinical conditions associated with MRPL49.

[50106] MSCP (Accession NP_061049.2) is another GAM7052 target gene, herein designated TARGET GENE. MSCP BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by MSCP, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MSCP BINDING SITE, designated SEQ ID:12409, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50107] Another function of GAM7052 is therefore inhibition of MSCP (Accession NP_061049.2) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MSCP.

[50108] MSTP028 (Accession NP_114160.1) is another GAM7052 target gene, herein designated TARGET GENE. MSTP028 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MSTP028, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

MSTP028 BINDING SITE, designated SEQ ID:14617, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50109] Another function of GAM7052 is therefore inhibition of MSTP028 (Accession NP_114160.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MSTP028.

[50110] MtFMT (Accession NP_640335.1) is another GAM7052 target gene, herein designated TARGET GENE. MtFMT BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MtFMT, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MtFMT BINDING SITE, designated SEQ ID:11229, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50111] Another function of GAM7052 is therefore inhibition of MtFMT (Accession NP_640335.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MtFMT.

[50112] MTH2 (Accession NP_060753.1) is another GAM7052 tar-

get gene, herein designated TARGET GENE. MTH2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MTH2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MTH2 BINDING SITE, designated SEQ ID:4662, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50113] Another function of GAM7052 is therefore inhibition of MTH2 (Accession NP_060753.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MTH2.

[50114] Myosin 5c (MYO5C, Accession NP_061198.1) is another GAM7052 target gene, herein designated TARGET GENE. MYO5C BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MYO5C, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MYO5C BINDING SITE, designated SEQ ID:8527, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50115] Another function of GAM7052 is therefore inhibition of Myosin 5c (MYO5C, Accession NP_061198.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MYO5C.

[50116] NCAG1 (Accession NP_115536.1) is another GAM7052 target gene, herein designated TARGET GENE. NCAG1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by NCAG1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NCAG1 BINDING SITE, designated SEQ ID:9119, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50117] Another function of GAM7052 is therefore inhibition of NCAG1 (Accession NP_115536.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NCAG1.

[50118] Nuclear receptor coactivator 6 (NCOA6, Accession NP_054790.1) is another GAM7052 target gene, herein designated TARGET GENE. NCOA6 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA

encoded by NCOA6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NCOA6 BINDING SITE, designated SEQ ID:8801, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50119] Another function of GAM7052 is therefore inhibition of Nuclear receptor coactivator 6 (NCOA6, Accession NP_054790.1), a gene which activates gene transcription through ligand- dependent association with coactivators. and therefore may be associated with Breast cancer. Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of Breast cancer., and of other diseases and clinical conditions associated with NCOA6.

[50120] The function of NCOA6 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM161.1.Nuclear receptor coactivator 6 interacting protein (NCOA6IP, Accession NP_079107.5) is another GAM7052 target gene, herein designated TARGET GENE. NCOA6IP BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by NCOA6IP,

corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NCOA6IP BINDING SITE, designated SEQ ID:16997, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50121] Another function of GAM7052 is therefore inhibition of Nuclear receptor coactivator 6 interacting protein (NCOA6IP, Accession NP_079107.5) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NCOA6IP.

[50122] NDP52 (Accession NP_005822.1) is another GAM7052 target gene, herein designated TARGET GENE. NDP52 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by NDP52, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NDP52 BINDING SITE, designated SEQ ID:13638, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50123] Another function of GAM7052 is therefore inhibition of

NDP52 (Accession NP_005822.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NDP52.

[50124] Neurofibromin 2 (bilateral acoustic neuroma) (NF2, Accession NP_057502.1) is another GAM7052 target gene, herein designated TARGET GENE. NF2 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by NF2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NF2 BINDING SITE, designated SEQ ID:1234, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50125] Another function of GAM7052 is therefore inhibition of Neurofibromin 2 (bilateral acoustic neuroma) (NF2, Accession NP_057502.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NF2.

[50126] Nescient helix loop helix 1 (NHLH1, Accession NP_005589.1) is another GAM7052 target gene, herein designated TARGET GENE. NHLH1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA

encoded by NHLH1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NHLH1 BINDING SITE, designated SEQ ID:10682, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50127] Another function of GAM7052 is therefore inhibition of Nescient helix loop helix 1 (NHLH1, Accession NP_005589.1), a gene which may have a role in development of the nervous system. Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NHLH1.

[50128] The function of NHLH1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM354.1.Nidogen (enactin) (NID, Accession NP_002499.1) is another GAM7052 target gene, herein designated TARGET GENE. NID BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by NID, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the

nucleotide sequences of NID BINDING SITE, designated SEQ ID:10147, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50129] Another function of GAM7052 is therefore inhibition of Nidogen (enactin) (NID, Accession NP_002499.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NID.

[50130] N-myristoyltransferase 1 (NMT1, Accession NP_066565.1) is another GAM7052 target gene, herein designated TARGET GENE. NMT1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by NMT1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NMT1 BINDING SITE, designated SEQ ID:14612, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50131] Another function of GAM7052 is therefore inhibition of N-myristoyltransferase 1 (NMT1, Accession NP_066565.1) . Accordingly, utilities of GAM7052 include diagnosis, pre-

vention and treatment of diseases and clinical conditions associated with NMT1.

[50132] NOSIP (Accession NP_057037.1) is another GAM7052 target gene, herein designated TARGET GENE. NOSIP BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by NOSIP, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NOSIP BINDING SITE, designated SEQ ID:4828, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50133] Another function of GAM7052 is therefore inhibition of NOSIP (Accession NP_057037.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NOSIP.

[50134] Nudix (nucleoside diphosphate linked moiety x)-type motif 4 (NUDT4, Accession NP_061967.2) is another GAM7052 target gene, herein designated TARGET GENE. NUDT4 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by NUDT4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 il-

illustrates the complementarity of the nucleotide sequences of NUDT4 BINDING SITE, designated SEQ ID:13741, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50135] Another function of GAM7052 is therefore inhibition of Nudix (nucleoside diphosphate linked moiety x)-type motif 4 (NUDT4, Accession NP_061967.2) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NUDT4.

[50136] Nuclear fragile x mental retardation protein interacting protein 1 (NUFIP1, Accession NP_036477.1) is another GAM7052 target gene, herein designated TARGET GENE. NUFIP1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by NUFIP1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NUFIP1 BINDING SITE, designated SEQ ID:12644, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50137] Another function of GAM7052 is therefore inhibition of Nuclear fragile x mental retardation protein interacting

protein 1 (NUFIP1, Accession NP_036477.1), a gene which binds and colocalizes with nuclear fragile X mental retardation protein. Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NUFIP1.

[50138] The function of NUFIP1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM139.2. Nuclear mitotic apparatus protein 1 (NUMA1, Accession NP_006176.1) is another GAM7052 target gene, herein designated TARGET GENE. NUMA1 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by NUMA1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NUMA1 BINDING SITE, designated SEQ ID:13914, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50139] Another function of GAM7052 is therefore inhibition of Nuclear mitotic apparatus protein 1 (NUMA1, Accession NP_006176.1), a gene which is nuclear mitotic apparatus protein. Accordingly, utilities of GAM7052 include diagno-

sis, prevention and treatment of diseases and clinical conditions associated with NUMA1.

[50140] The function of NUMA1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM133.1. Nucleoredoxin (NXN, Accession NP_071908.1) is another GAM7052 target gene, herein designated TARGET GENE. NXN BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by NXN, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NXN BINDING SITE, designated SEQ ID:10897, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50141] Another function of GAM7052 is therefore inhibition of Nucleoredoxin (NXN, Accession NP_071908.1). Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NXN.

[50142] Oral cancer overexpressed 1 (ORAOV1, Accession NP_703152.1) is another GAM7052 target gene, herein

designated TARGET GENE. ORAOV1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ORAOV1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ORAOV1 BINDING SITE, designated SEQ ID:8157, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50143] Another function of GAM7052 is therefore inhibition of Oral cancer overexpressed 1 (ORAOV1, Accession NP_703152.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ORAOV1.

[50144] Oxysterol binding protein-like 2 (OSBPL2, Accession NP_653081.1) is another GAM7052 target gene, herein designated TARGET GENE. OSBPL2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by OSBPL2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of OSBPL2 BINDING SITE, designated SEQ ID:13183, to the nu-

cleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50145] Another function of GAM7052 is therefore inhibition of Oxysterol binding protein-like 2 (OSBPL2, Accession NP_653081.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with OSBPL2.

[50146] Oxysterol binding protein-like 2 (OSBPL2, Accession NP_055650.1) is another GAM7052 target gene, herein designated TARGET GENE. OSBPL2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by OSBPL2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of OSBPL2 BINDING SITE, designated SEQ ID:13183, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50147] Another function of GAM7052 is therefore inhibition of Oxysterol binding protein-like 2 (OSBPL2, Accession NP_055650.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with OSBPL2.

[50148] Pas domain containing serine/threonine kinase (PASK, Accession NP_055963.1) is another GAM7052 target gene, herein designated TARGET GENE. PASK BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by PASK, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PASK BINDING SITE, designated SEQ ID:9616, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50149] Another function of GAM7052 is therefore inhibition of Pas domain containing serine/threonine kinase (PASK, Accession NP_055963.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PASK.

[50150] Protocadherin alpha 9 (PCDHA9, Accession NP_054724.1) is another GAM7052 target gene, herein designated TARGET GENE. PCDHA9 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PCDHA9, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the comple-

mentarity of the nucleotide sequences of PCDHA9 BINDING SITE, designated SEQ ID:11228, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50151] Another function of GAM7052 is therefore inhibition of Protocadherin alpha 9 (PCDHA9, Accession NP_054724.1), a gene which is a calcium-dependent cell-adhesion protein. Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PCDHA9.

[50152] The function of PCDHA9 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1. Phosphodiesterase 6b, cgmp-specific, rod, beta (congenital stationary night blindness 3, autosomal dominant) (PDE6B, Accession NP_000274.1) is another GAM7052 target gene, herein designated TARGET GENE. PDE6B BINDING SITE1 and PDE6B BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by PDE6B, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PDE6B BINDING SITE1 and PDE6B

BINDING SITE2, designated SEQ ID:7445 and SEQ ID:9847 respectively, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50153] Another function of GAM7052 is therefore inhibition of Phosphodiesterase 6b, cgmp-specific, rod, beta (congenital stationary night blindness 3, autosomal dominant) (PDE6B, Accession NP_000274.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PDE6B.

[50154] Pellino homolog 1 (drosophila) (PELI1, Accession NP_065702.2) is another GAM7052 target gene, herein designated TARGET GENE. PELI1 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by PELI1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PELI1 BINDING SITE, designated SEQ ID:10821, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50155] Another function of GAM7052 is therefore inhibition of

Pellino homolog 1 (drosophila) (PELI1, Accession NP_065702.2) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PELI1.

[50156] Period homolog 2 (drosophila) (PER2, Accession NP_073728.1) is another GAM7052 target gene, herein designated TARGET GENE. PER2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PER2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PER2 BINDING SITE, designated SEQ ID:18316, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50157] Another function of GAM7052 is therefore inhibition of Period homolog 2 (drosophila) (PER2, Accession NP_073728.1), a gene which Period homolog 2; putative circadian clock protein; has a PAS dimerization domain and therefore may be associated with Familial advanced sleep- phase syndrome. Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of Familial advanced sleep- phase syndrome, and of other diseases

and clinical conditions associated with PER2.

[50158] The function of PER2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM130.1.PHAX (Accession NP_115553.1) is another GAM7052 target gene, herein designated TARGET GENE. PHAX BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PHAX, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PHAX BINDING SITE, designated SEQ ID:14737, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50159] Another function of GAM7052 is therefore inhibition of PHAX (Accession NP_115553.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PHAX.

[50160] Phosphoinositide-3-kinase, class 2, beta polypeptide (PIK3C2B, Accession NP_002637.2) is another GAM7052 target gene, herein designated TARGET GENE. PIK3C2B BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PIK3C2B, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PIK3C2B BINDING SITE, designated SEQ ID:16722, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50161] Another function of GAM7052 is therefore inhibition of Phosphoinositide-3-kinase, class 2, beta polypeptide (PIK3C2B, Accession NP_002637.2) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PIK3C2B.

[50162] Phosphoinositide-3-kinase, catalytic, delta polypeptide (PIK3CD, Accession NP_005017.2) is another GAM7052 target gene, herein designated TARGET GENE. PIK3CD BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PIK3CD, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PIK3CD BINDING SITE, designated SEQ ID:9691, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50163] Another function of GAM7052 is therefore inhibition of Phosphoinositide-3-kinase, catalytic, delta polypeptide (PIK3CD, Accession NP_005017.2), a gene which regulating cell growth. Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PIK3CD.

[50164] The function of PIK3CD and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM136.1.Pbx/knotted 1 homeobox 1 (PKNOX1, Accession NP_004562.2) is another GAM7052 target gene, herein designated TARGET GENE. PKNOX1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PKNOX1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PKNOX1 BINDING SITE, designated SEQ ID:16723, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50165] Another function of GAM7052 is therefore inhibition of Pbx/knotted 1 homeobox 1 (PKNOX1, Accession NP_004562.2), a gene which may regulate gene expres-

sion and control cell differentiation. Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PKNOX1.

[50166] The function of PKNOX1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM55.1. Phospholipase c, delta 3 (PLCD3, Accession NP_588614.1) is another GAM7052 target gene, herein designated TARGET GENE. PLCD3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PLCD3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PLCD3 BINDING SITE, designated SEQ ID:11178, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50167] Another function of GAM7052 is therefore inhibition of Phospholipase c, delta 3 (PLCD3, Accession NP_588614.1). Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PLCD3.

[50168] Paraneoplastic antigen ma2 (PNMA2, Accession NP_009188.1) is another GAM7052 target gene, herein designated TARGET GENE. PNMA2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PNMA2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PNMA2 BINDING SITE, designated SEQ ID:10897, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50169] Another function of GAM7052 is therefore inhibition of Paraneoplastic antigen ma2 (PNMA2, Accession NP_009188.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PNMA2.

[50170] POLD3 (Accession XP_166243.1) is another GAM7052 target gene, herein designated TARGET GENE. POLD3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by POLD3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of POLD3

BINDING SITE, designated SEQ ID:19468, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50171] Another function of GAM7052 is therefore inhibition of POLD3 (Accession XP_166243.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with POLD3.

[50172] Pou domain, class 2, associating factor 1 (POU2AF1, Accession NP_006226.1) is another GAM7052 target gene, herein designated TARGET GENE. POU2AF1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by POU2AF1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of POU2AF1 BINDING SITE, designated SEQ ID:16360, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50173] Another function of GAM7052 is therefore inhibition of Pou domain, class 2, associating factor 1 (POU2AF1, Accession NP_006226.1), a gene which is a transcriptional coactivator that specifically associates with either oct1 or oct2 and therefore may be associated with A form of b-

cell leukemia. Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of A form of b- cell leukemia, and of other diseases and clinical conditions associated with POU2AF1.

[50174] The function of POU2AF1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1.PP1665 (Accession NP_110419.3) is another GAM7052 target gene, herein designated TARGET GENE. PP1665 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by PP1665, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PP1665 BINDING SITE, designated SEQ ID:15458, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50175] Another function of GAM7052 is therefore inhibition of PP1665 (Accession NP_110419.3) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PP1665.

[50176] Protein phosphatase, ef hand calcium-binding domain 2 (PPEF2, Accession NP_690911.1) is another GAM7052 tar-

get gene, herein designated TARGET GENE. PPEF2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PPEF2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PPEF2 BINDING SITE, designated SEQ ID:16723, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50177] Another function of GAM7052 is therefore inhibition of Protein phosphatase, ef hand calcium-binding domain 2 (PPEF2, Accession NP_690911.1), a gene which is a homolog of Drosophila rdgC. Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PPEF2.

[50178] The function of PPEF2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM66.2. Protein phosphatase, ef hand calcium-binding domain 2 (PPEF2, Accession NP_690910.1) is another GAM7052 target gene, herein designated TARGET GENE. PPEF2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA

encoded by PPEF2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PPEF2 BINDING SITE, designated SEQ ID:16723, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50179] Another function of GAM7052 is therefore inhibition of Protein phosphatase, ef hand calcium-binding domain 2 (PPEF2, Accession NP_690910.1), a gene which is a homolog of *Drosophila* rdgC. Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PPEF2.

[50180] The function of PPEF2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM66.2. Protein phosphatase, ef hand calcium-binding domain 2 (PPEF2, Accession NP_006230.2) is another GAM7052 target gene, herein designated TARGET GENE. PPEF2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PPEF2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III

of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PPEF2 BINDING SITE, designated SEQ ID:16723, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50181] Another function of GAM7052 is therefore inhibition of Protein phosphatase, ef hand calcium-binding domain 2 (PPEF2, Accession NP_006230.2), a gene which is a homolog of *Drosophila* rdgC. Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PPEF2.

[50182] The function of PPEF2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM66.2. Pprf interacting protein, binding protein 1 (liprin beta 1) (PPFIBP1, Accession NP_003613.2) is another GAM7052 target gene, herein designated TARGET GENE. PPFIBP1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PPFIBP1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PPFIBP1 BINDING

SITE, designated SEQ ID:9291, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50183] Another function of GAM7052 is therefore inhibition of Ptpfr interacting protein, binding protein 1 (liprin beta 1) (PPFIBP1, Accession NP_003613.2) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PP-FIBP1.

[50184] Peptidylprolyl isomerase d (cyclophilin d) (PPID, Accession NP_005029.1) is another GAM7052 target gene, herein designated TARGET GENE. PPID BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PPID, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PPID BINDING SITE, designated SEQ ID:10127, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50185] Another function of GAM7052 is therefore inhibition of Peptidylprolyl isomerase d (cyclophilin d) (PPID, Accession NP_005029.1), a gene which catalyzes the cis- trans iso-

merization of proline imidic peptide bonds in oligopeptides. Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PPID.

[50186] The function of PPID and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM136.1. Protein phosphatase 1, regulatory (inhibitor) subunit 16b (PPP1R16B, Accession NP_056383.1) is another GAM7052 target gene, herein designated TARGET GENE. PPP1R16B BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PPP1R16B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PPP1R16B BINDING SITE, designated SEQ ID:4482, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50187] Another function of GAM7052 is therefore inhibition of Protein phosphatase 1, regulatory (inhibitor) subunit 16b (PPP1R16B, Accession NP_056383.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with PPP1R16B.

[50188] Protein kinase, interferon-inducible double stranded rna dependent (PRKR, Accession NP_002750.1) is another GAM7052 target gene, herein designated TARGET GENE. PRKR BINDING SITE1 and PRKR BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by PRKR, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PRKR BINDING SITE1 and PRKR BINDING SITE2, designated SEQ ID:15131 and SEQ ID:14827 respectively, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50189] Another function of GAM7052 is therefore inhibition of Protein kinase, interferon-inducible double stranded rna dependent (PRKR, Accession NP_002750.1), a gene which catalyze the phosphorylation of the alpha subunit of eif2. and therefore may be associated with Huntington's disease. Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of Huntington's disease, and of other diseases and clinical conditions associated with

PRKR.

[50190] The function of PRKR and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM136.1. Protein kinase, lysine deficient 3 (PRKWNK3, Accession NP_065973.1) is another GAM7052 target gene, herein designated TARGET GENE. PRKWNK3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PRKWNK3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PRKWNK3 BINDING SITE, designated SEQ ID:5689, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50191] Another function of GAM7052 is therefore inhibition of Protein kinase, lysine deficient 3 (PRKWNK3, Accession NP_065973.1). Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PRKWNK3.

[50192] Prion protein 2 (dublet) (PRND, Accession NP_036541.1) is another GAM7052 target gene, herein designated TARGET GENE. PRND BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by PRND, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PRND BINDING SITE, designated SEQ ID:14582, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50193] Another function of GAM7052 is therefore inhibition of Prion protein 2 (dublet) (PRND, Accession NP_036541.1), a gene which is similar to prion protein PRNP. Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PRND.

[50194] The function of PRND and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM116.1.PRO0971 (Accession NP_061039.2) is another GAM7052 target gene, herein designated TARGET GENE. PRO0971 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PRO0971, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of PRO0971 BINDING SITE, designated SEQ ID:7840, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50195] Another function of GAM7052 is therefore inhibition of PRO0971 (Accession NP_061039.2) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PRO0971.

[50196] Proline-serine-threonine phosphatase interacting protein 2 (PSTPIP2, Accession NP_077748.2) is another GAM7052 target gene, herein designated TARGET GENE. PSTPIP2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PSTPIP2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PSTPIP2 BINDING SITE, designated SEQ ID:8011, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50197] Another function of GAM7052 is therefore inhibition of Proline-serine-threonine phosphatase interacting protein 2 (PSTPIP2, Accession NP_077748.2) . Accordingly, utilities

of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PST-PIP2.

[50198] Prostaglandin e synthase (PTGES, Accession NP_004869.1) is another GAM7052 target gene, herein designated TARGET GENE. PTGES BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PTGES, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PTGES BINDING SITE, designated SEQ ID:12377, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50199] Another function of GAM7052 is therefore inhibition of Prostaglandin e synthase (PTGES, Accession NP_004869.1). Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PTGES.

[50200] Prostaglandin i2 (prostacyclin) synthase (PTGIS, Accession NP_000952.1) is another GAM7052 target gene, herein designated TARGET GENE. PTGIS BINDING SITE is a target binding site found in the 3' untranslated region of mRNA

encoded by PTGIS, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PTGIS BINDING SITE, designated SEQ ID:8761, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50201] Another function of GAM7052 is therefore inhibition of Prostaglandin i2 (prostacyclin) synthase (PTGIS, Accession NP_000952.1), a gene which catalyzes the isomerization of prostaglandin h2 to prostacyclin (= prostaglandin i2). Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PTGIS.

[50202] The function of PTGIS and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1. Protein tyrosine phosphatase, non-receptor type 18 (brain-derived) (PTPN18, Accession NP_055184.2) is another GAM7052 target gene, herein designated TARGET GENE. PTPN18 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PTPN18, corresponding to a target binding site such as

BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PTPN18 BINDING SITE, designated SEQ ID:17110, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50203] Another function of GAM7052 is therefore inhibition of Protein tyrosine phosphatase, non-receptor type 18 (brain-derived) (PTPN18, Accession NP_055184.2) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PTPN18.

[50204] Protein tyrosine phosphatase, receptor type, t (PTPRT, Accession NP_008981.2) is another GAM7052 target gene, herein designated TARGET GENE. PTPRT BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PTPRT, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PTPRT BINDING SITE, designated SEQ ID:18384, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50205] Another function of GAM7052 is therefore inhibition of Protein tyrosine phosphatase, receptor type, t (PTPRT, Accession NP_008981.2) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PTPRT.

[50206] Protein tyrosine phosphatase, receptor type, t (PTPRT, Accession NP_573400.1) is another GAM7052 target gene, herein designated TARGET GENE. PTPRT BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PTPRT, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PTPRT BINDING SITE, designated SEQ ID:18384, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50207] Another function of GAM7052 is therefore inhibition of Protein tyrosine phosphatase, receptor type, t (PTPRT, Accession NP_573400.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PTPRT.

[50208] RAB11-FIP4 (Accession NP_116321.2) is another GAM7052 target gene, herein designated TARGET GENE.

RAB11-FIP4 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RAB11-FIP4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RAB11-FIP4 BINDING SITE, designated SEQ ID:1607, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50209] Another function of GAM7052 is therefore inhibition of RAB11-FIP4 (Accession NP_116321.2) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RAB11-FIP4.

[50210] Rab33b, member ras oncogene family (RAB33B, Accession NP_112586.1) is another GAM7052 target gene, herein designated TARGET GENE. RAB33B BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RAB33B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RAB33B BINDING SITE, designated SEQ ID:19271, to the nucleotide se-

quence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50211] Another function of GAM7052 is therefore inhibition of Rab33b, member ras oncogene family (RAB33B, Accession NP_112586.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RAB33B.

[50212] Rab34, member ras oncogene family (RAB34, Accession NP_114140.2) is another GAM7052 target gene, herein designated TARGET GENE. RAB34 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RAB34, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RAB34 BINDING SITE, designated SEQ ID:8691, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50213] Another function of GAM7052 is therefore inhibition of Rab34, member ras oncogene family (RAB34, Accession NP_114140.2) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RAB34.

[50214] Rab36, member ras oncogene family (RAB36, Accession NP_004905.1) is another GAM7052 target gene, herein designated TARGET GENE. RAB36 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RAB36, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RAB36 BINDING SITE, designated SEQ ID:2107, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50215] Another function of GAM7052 is therefore inhibition of Rab36, member ras oncogene family (RAB36, Accession NP_004905.1), a gene which is involved in protein transport. Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RAB36.

[50216] The function of RAB36 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM130.1.RAI (Accession NP_006654.1) is another GAM7052 target gene, herein designated TARGET GENE. RAI BINDING SITE is a target binding site found in the 5'

untranslated region of mRNA encoded by RAI, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RAI BINDING SITE, designated SEQ ID:13915, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50217] Another function of GAM7052 is therefore inhibition of RAI (Accession NP_006654.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RAI.

[50218] Rap1, gtpase activating protein 1 (RAP1GA1, Accession NP_002876.1) is another GAM7052 target gene, herein designated TARGET GENE. RAP1GA1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RAP1GA1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RAP1GA1 BINDING SITE, designated SEQ ID:16882, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50219] Another function of GAM7052 is therefore inhibition of

Rap1, gtpase activating protein 1 (RAP1GA1, Accession NP_002876.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RAP1GA1.

[50220] Ras association (ralgds/af-6) domain family 2 (RASSF2, Accession NP_739580.1) is another GAM7052 target gene, herein designated TARGET GENE. RASSF2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by RASSF2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RASSF2 BINDING SITE, designated SEQ ID:9279, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50221] Another function of GAM7052 is therefore inhibition of Ras association (ralgds/af-6) domain family 2 (RASSF2, Accession NP_739580.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RASSF2.

[50222] Ras association (ralgds/af-6) domain family 2 (RASSF2, Accession NP_055552.1) is another GAM7052 target gene, herein designated TARGET GENE. RASSF2 BINDING SITE is

a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by RASSF2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RASSF2 BINDING SITE, designated SEQ ID:9279, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50223] Another function of GAM7052 is therefore inhibition of Ras association (ralgds/af-6) domain family 2 (RASSF2, Accession NP_055552.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RASSF2.

[50224] Ras association (ralgds/af-6) domain family 2 (RASSF2, Accession NP_739579.1) is another GAM7052 target gene, herein designated TARGET GENE. RASSF2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by RASSF2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RASSF2 BINDING SITE, designated SEQ ID:9279, to the nucleotide sequence of GAM7052 RNA, herein designated

GAM RNA, also designated SEQ ID:296.

[50225] Another function of GAM7052 is therefore inhibition of Ras association (ralgds/af-6) domain family 2 (RASSF2, Accession NP_739579.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RASSF2.

[50226] Rna binding motif protein 8a (RBM8A, Accession NP_005096.1) is another GAM7052 target gene, herein designated TARGET GENE. RBM8A BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RBM8A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RBM8A BINDING SITE, designated SEQ ID:18273, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50227] Another function of GAM7052 is therefore inhibition of Rna binding motif protein 8a (RBM8A, Accession NP_005096.1), a gene which involves in the pathway of gene expression postsplicing nuclear preexport mRNPs, and newly exported cytoplasmic mRNPs. Accordingly, utilities of GAM7052 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with RBM8A.

[50228] The function of RBM8A and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM47.1.RDH13 (Accession NP_612421.1) is another GAM7052 target gene, herein designated TARGET GENE. RDH13 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by RDH13, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RDH13 BINDING SITE, designated SEQ ID:7857, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50229] Another function of GAM7052 is therefore inhibition of RDH13 (Accession NP_612421.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RDH13.

[50230] Rhesus blood group, d antigen (RHD, Accession NP_057208.2) is another GAM7052 target gene, herein designated TARGET GENE. RHD BINDING SITE1 and RHD BINDING SITE2 are target binding sites found in untrans-

lated regions of multiple transcripts of mRNA encoded by RHD, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RHD BINDING SITE1 and RHD BINDING SITE2, designated SEQ ID:8197 and SEQ ID:13068 respectively, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50231] Another function of GAM7052 is therefore inhibition of Rhesus blood group, d antigen (RHD, Accession NP_057208.2), a gene which Major antigen of the RH system. Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RHD.

[50232] The function of RHD and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM161.1. Rhesus blood group, d antigen (RHD, Accession NP_057309.2) is another GAM7052 target gene, herein designated TARGET GENE. RHD BINDING SITE1 and RHD BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by RHD, corresponding to target binding sites such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RHD BINDING SITE1 and RHD BINDING SITE2, designated SEQ ID:8197 and SEQ ID:13068 respectively, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50233] Another function of GAM7052 is therefore inhibition of Rhesus blood group, d antigen (RHD, Accession NP_057309.2), a gene which Major antigen of the RH system. Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RHD.

[50234] The function of RHD and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM161.1.RINZF (Accession NP_076418.2) is another GAM7052 target gene, herein designated TARGET GENE. RINZF BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RINZF, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RINZF BINDING SITE, designated SEQ ID:3551, to the nu-

cleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50235] Another function of GAM7052 is therefore inhibition of RINZF (Accession NP_076418.2) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RINZF.

[50236] RNF137 (Accession NP_060543.4) is another GAM7052 target gene, herein designated TARGET GENE. RNF137 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RNF137, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RNF137 BINDING SITE, designated SEQ ID:4953, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50237] Another function of GAM7052 is therefore inhibition of RNF137 (Accession NP_060543.4) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RNF137.

[50238] RNF144 (Accession NP_055561.1) is another GAM7052 target gene, herein designated TARGET GENE. RNF144

BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RNF144, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RNF144 BINDING SITE, designated SEQ ID:1187, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50239] Another function of GAM7052 is therefore inhibition of RNF144 (Accession NP_055561.1). Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RNF144.

[50240] Ring finger protein 3 (RNF3, Accession NP_006306.2) is another GAM7052 target gene, herein designated TARGET GENE. RNF3 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by RNF3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RNF3 BINDING SITE, designated SEQ ID:6218, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also design-

nated SEQ ID:296.

[50241] Another function of GAM7052 is therefore inhibition of Ring finger protein 3 (RNF3, Accession NP_006306.2), a gene which is a mitogen- activated nuclear kinase involved in signal transduction. Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RNF3.

[50242] The function of RNF3 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM63.1.Retinitis pigmentosa 2 (x-linked recessive) (RP2, Accession NP_008846.1) is another GAM7052 target gene, herein designated TARGET GENE. RP2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RP2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RP2 BINDING SITE, designated SEQ ID:10728, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50243] Another function of GAM7052 is therefore inhibition of Retinitis pigmentosa 2 (x-linked recessive) (RP2, Acces-

sion NP_008846.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RP2.

[50244] Rabphilin 3a-like (without c2 domains) (RPH3AL, Accession NP_008918.1) is another GAM7052 target gene, herein designated TARGET GENE. RPH3AL BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RPH3AL, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RPH3AL BINDING SITE, designated SEQ ID:2060, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50245] Another function of GAM7052 is therefore inhibition of Rabphilin 3a-like (without c2 domains) (RPH3AL, Accession NP_008918.1), a gene which is a protein transporter. could play a role in neurotransmitter release by regulating membrane flow in the nerve terminal. Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RPH3AL.

[50246] The function of RPH3AL and its association with various

diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1.RPP30 (Accession NP_006404.1) is another GAM7052 target gene, herein designated TARGET GENE. RPP30 BINDING SITE1 and RPP30 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by RPP30, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RPP30 BINDING SITE1 and RPP30 BINDING SITE2, designated SEQ ID:14044 and SEQ ID:17179 respectively, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50247] Another function of GAM7052 is therefore inhibition of RPP30 (Accession NP_006404.1), a gene which is a component of ribonuclease p that processes 5' ends of precursor tRNAs. Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RPP30.

[50248] The function of RPP30 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM136.1.Sarcoma amplified sequence (SAS, Accession NP_005972.1) is another GAM7052 target gene, herein designated TARGET GENE. SAS BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SAS, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SAS BINDING SITE, designated SEQ ID:12782, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50249] Another function of GAM7052 is therefore inhibition of Sarcoma amplified sequence (SAS, Accession NP_005972.1), a gene which is a member of the trans-membrane 4 superfamily (TM4SF) and may be involved in growth-related cellular processes T. Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SAS.

[50250] The function of SAS and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM88.1.Sterol-c4-methyl oxidase-like (SC4MOL, Accession NP_006736.1) is another GAM7052 target gene,

herein designated TARGET GENE. SC4MOL BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SC4MOL, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SC4MOL BINDING SITE, designated SEQ ID:1187, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50251] Another function of GAM7052 is therefore inhibition of Sterol-c4-methyl oxidase-like (SC4MOL, Accession NP_006736.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SC4MOL.

[50252] Scan domain containing 2 (SCAND2, Accession NP_071333.2) is another GAM7052 target gene, herein designated TARGET GENE. SCAND2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by SCAND2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SCAND2 BINDING SITE, designated SEQ ID:13669, to the

nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50253] Another function of GAM7052 is therefore inhibition of Scan domain containing 2 (SCAND2, Accession NP_071333.2) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SCAND2.

[50254] SCN3B (Accession NP_060870.1) is another GAM7052 target gene, herein designated TARGET GENE. SCN3B BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SCN3B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SCN3B BINDING SITE, designated SEQ ID:6424, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50255] Another function of GAM7052 is therefore inhibition of SCN3B (Accession NP_060870.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SCN3B.

[50256] SDS-RS1 (Accession NP_612441.1) is another GAM7052 target gene, herein designated TARGET GENE. SDS-RS1

BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by SDS-RS1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SDS-RS1 BINDING SITE, designated SEQ ID:12439, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50257] Another function of GAM7052 is therefore inhibition of SDS-RS1 (Accession NP_612441.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SDS-RS1.

[50258] Spondyloepiphyseal dysplasia, late (SEDL, Accession NP_055378.1) is another GAM7052 target gene, herein designated TARGET GENE. SEDL BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SEDL, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SEDL BINDING SITE, designated SEQ ID:16885, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ

ID:296.

[50259] Another function of GAM7052 is therefore inhibition of Spondyloepiphyseal dysplasia, late (SEDL, Accession NP_055378.1), a gene which may play role in vesicular transport from endoplasmic reticulum to golgi. and therefore may be associated with Spondyloepiphyseal dysplasia. Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of Spondyloepiphyseal dysplasia, and of other diseases and clinical conditions associated with SEDL.

[50260] The function of SEDL and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1.Sema domain, immunoglobulin domain (ig), transmembrane domain (tm) and short cytoplasmic domain, (semaphorin) 4g (SEMA4G, Accession NP_060363.2) is another GAM7052 target gene, herein designated TARGET GENE. SEMA4G BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by SEMA4G, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SEMA4G BINDING SITE, designated

SEQ ID:6560, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50261] Another function of GAM7052 is therefore inhibition of Sema domain, immunoglobulin domain (ig), transmembrane domain (tm) and short cytoplasmic domain, (semaphorin) 4g (SEMA4G, Accession NP_060363.2) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SEMA4G.

[50262] Selenoprotein n, 1 (SEPN1, Accession NP_065184.1) is another GAM7052 target gene, herein designated TARGET GENE. SEPN1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SEPN1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SEPN1 BINDING SITE, designated SEQ ID:16360, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50263] Another function of GAM7052 is therefore inhibition of Selenoprotein n, 1 (SEPN1, Accession NP_065184.1) . Accordingly, utilities of GAM7052 include diagnosis, preven-

tion and treatment of diseases and clinical conditions associated with SEPNI.

[50264] Small edrk-rich factor 1a (telomeric) (SERF1A, Accession NP_068802.1) is another GAM7052 target gene, herein designated TARGET GENE. SERF1A BINDING SITE1 and SERF1A BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by SERF1A, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SERF1A BINDING SITE1 and SERF1A BINDING SITE2, designated SEQ ID:12128 and SEQ ID:13493 respectively, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50265] Another function of GAM7052 is therefore inhibition of Small edrk-rich factor 1a (telomeric) (SERF1A, Accession NP_068802.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SERF1A.

[50266] Small edrk-rich factor 1b (centromeric) (SERF1B, Accession NP_075267.1) is another GAM7052 target gene, herein designated TARGET GENE. SERF1B BINDING SITE1 and SERF1B BINDING SITE2 are target binding sites found in

untranslated regions of mRNA encoded by SERF1B, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SERF1B BINDING SITE1 and SERF1B BINDING SITE2, designated SEQ ID:13493 and SEQ ID:12128 respectively, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50267] Another function of GAM7052 is therefore inhibition of Small edrk-rich factor 1b (centromeric) (SERF1B, Accession NP_075267.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SERF1B.

[50268] Splicing factor 3a, subunit 3, 60kda (SF3A3, Accession NP_006793.1) is another GAM7052 target gene, herein designated TARGET GENE. SF3A3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SF3A3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SF3A3 BINDING SITE, designated SEQ ID:5836, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ

ID:296.

[50269] Another function of GAM7052 is therefore inhibition of Splicing factor 3a, subunit 3, 60kda (SF3A3, Accession NP_006793.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SF3A3.

[50270] Sideroflexin 2 (SFXN2, Accession NP_849189.1) is another GAM7052 target gene, herein designated TARGET GENE. SFXN2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by SFXN2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SFXN2 BINDING SITE, designated SEQ ID:16442, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50271] Another function of GAM7052 is therefore inhibition of Sideroflexin 2 (SFXN2, Accession NP_849189.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SFXN2.

[50272] Sideroflexin 2 (SFXN2, Accession XP_058359.2) is another

GAM7052 target gene, herein designated TARGET GENE. SFXN2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by SFXN2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SFXN2 BINDING SITE, designated SEQ ID:16442, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50273] Another function of GAM7052 is therefore inhibition of Sideroflexin 2 (SFXN2, Accession XP_058359.2) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SFXN2.

[50274] Shc (src homology 2 domain containing) transforming protein 1 (SHC1, Accession NP_003020.1) is another GAM7052 target gene, herein designated TARGET GENE. SHC1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SHC1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

SHC1 BINDING SITE, designated SEQ ID:15883, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50275] Another function of GAM7052 is therefore inhibition of Shc (src homology 2 domain containing) transforming protein 1 (SHC1, Accession NP_003020.1), a gene which couples activated growth factor receptors to a signaling pathway. Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SHC1.

[50276] The function of SHC1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM868.1. Short stature homeobox (SHOX, Accession NP_006874.1) is another GAM7052 target gene, herein designated TARGET GENE. SHOX BINDING SITE1 and SHOX BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by SHOX, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SHOX BINDING SITE1 and SHOX BINDING SITE2, designated SEQ ID:8761 and SEQ ID:2823

respectively, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50277] Another function of GAM7052 is therefore inhibition of Short stature homeobox (SHOX, Accession NP_006874.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SHOX.

[50278] Signal-regulatory protein beta 1 (SIRPB1, Accession NP_006056.1) is another GAM7052 target gene, herein designated TARGET GENE. SIRPB1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SIRPB1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SIRPB1 BINDING SITE, designated SEQ ID:16887, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50279] Another function of GAM7052 is therefore inhibition of Signal-regulatory protein beta 1 (SIRPB1, Accession NP_006056.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical

cal conditions associated with SIRPB1.

[50280] Solute carrier family 12 (potassium/chloride transporters), member 8 (SLC12A8, Accession NP_078904.1) is another GAM7052 target gene, herein designated TARGET GENE. SLC12A8 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SLC12A8, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC12A8 BINDING SITE, designated SEQ ID:17034, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50281] Another function of GAM7052 is therefore inhibition of Solute carrier family 12 (potassium/chloride transporters), member 8 (SLC12A8, Accession NP_078904.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SLC12A8.

[50282] Solute carrier family 15 (oligopeptide transporter), member 1 (SLC15A1, Accession NP_005064.1) is another GAM7052 target gene, herein designated TARGET GENE. SLC15A1 BINDING SITE1 and SLC15A1 BINDING SITE2 are target binding sites found in untranslated regions of

mRNA encoded by SLC15A1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC15A1 BINDING SITE1 and SLC15A1 BINDING SITE2, designated SEQ ID:15654 and SEQ ID:12924 respectively, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50283] Another function of GAM7052 is therefore inhibition of Solute carrier family 15 (oligopeptide transporter), member 1 (SLC15A1, Accession NP_005064.1), a gene which is a H(+)- coupled peptide transporter. Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SLC15A1.

[50284] The function of SLC15A1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1. Solute carrier family 19, member 3 (SLC19A3, Accession NP_079519.1) is another GAM7052 target gene, herein designated TARGET GENE. SLC19A3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SLC19A3, corresponding to a

target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC19A3 BINDING SITE, designated SEQ ID:1083, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50285] Another function of GAM7052 is therefore inhibition of Solute carrier family 19, member 3 (SLC19A3, Accession NP_079519.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SLC19A3.

[50286] Solute carrier family 2 (facilitated glucose transporter), member 10 (SLC2A10, Accession NP_110404.1) is another GAM7052 target gene, herein designated TARGET GENE. SLC2A10 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SLC2A10, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC2A10 BINDING SITE, designated SEQ ID:17326, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50287] Another function of GAM7052 is therefore inhibition of

Solute carrier family 2 (facilitated glucose transporter), member 10 (SLC2A10, Accession NP_110404.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SLC2A10.

[50288] SLC30A5 (Accession NP_076960.1) is another GAM7052 target gene, herein designated TARGET GENE. SLC30A5 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by SLC30A5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC30A5 BINDING SITE, designated SEQ ID:5862, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50289] Another function of GAM7052 is therefore inhibition of SLC30A5 (Accession NP_076960.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SLC30A5.

[50290] SLC30A6 (Accession NP_060434.2) is another GAM7052 target gene, herein designated TARGET GENE. SLC30A6

BINDING SITE1 and SLC30A6 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by SLC30A6, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC30A6 BINDING SITE1 and SLC30A6 BINDING SITE2, designated SEQ ID:15429 and SEQ ID:8012 respectively, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50291] Another function of GAM7052 is therefore inhibition of SLC30A6 (Accession NP_060434.2) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SLC30A6.

[50292] Solute carrier family 6 (neurotransmitter transporter), member 14 (SLC6A14, Accession NP_009162.1) is another GAM7052 target gene, herein designated TARGET GENE. SLC6A14 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SLC6A14, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide se-

quences of SLC6A14 BINDING SITE, designated SEQ ID:15390, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50293] Another function of GAM7052 is therefore inhibition of Solute carrier family 6 (neurotransmitter transporter), member 14 (SLC6A14, Accession NP_009162.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SLC6A14.

[50294] Solute carrier family 9 (sodium/hydrogen exchanger), isoform 5 (SLC9A5, Accession NP_004585.1) is another GAM7052 target gene, herein designated TARGET GENE. SLC9A5 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SLC9A5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC9A5 BINDING SITE, designated SEQ ID:2167, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50295] Another function of GAM7052 is therefore inhibition of Solute carrier family 9 (sodium/hydrogen exchanger), isoform 5 (SLC9A5, Accession NP_004585.1) . Accordingly,

utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SLC9A5.

[50296] SMAC (Accession NP_620308.1) is another GAM7052 target gene, herein designated TARGET GENE. SMAC BINDING SITE1 and SMAC BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by SMAC, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SMAC BINDING SITE1 and SMAC BINDING SITE2, designated SEQ ID:11548 and SEQ ID:2683 respectively, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50297] Another function of GAM7052 is therefore inhibition of SMAC (Accession NP_620308.1), a gene which promotes apoptosis via caspase activation. Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SMAC.

[50298] The function of SMAC and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM136.1.Synaptosomal-associated protein, 23kda (SNAP23, Accession NP_003816.2) is another GAM7052 target gene, herein designated TARGET GENE. SNAP23 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by SNAP23, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SNAP23 BINDING SITE, designated SEQ ID:9468, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50299] Another function of GAM7052 is therefore inhibition of Synaptosomal-associated protein, 23kda (SNAP23, Accession NP_003816.2), a gene which is essential component of the high affinity receptor for the general membrane fusion machinery. Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SNAP23.

[50300] The function of SNAP23 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1.Synaptosomal-associated protein, 23kda

(SNAP23, Accession NP_570710.1) is another GAM7052 target gene, herein designated TARGET GENE. SNAP23 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by SNAP23, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SNAP23 BINDING SITE, designated SEQ ID:9468, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50301] Another function of GAM7052 is therefore inhibition of Synaptosomal-associated protein, 23kda (SNAP23, Accession NP_570710.1), a gene which is essential component of the high affinity receptor for the general membrane fusion machinery. Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SNAP23.

[50302] The function of SNAP23 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1.SNARK (Accession NP_112214.1) is another GAM7052 target gene, herein designated TARGET GENE.

SNARK BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SNARK, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SNARK BINDING SITE, designated SEQ ID:1482, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50303] Another function of GAM7052 is therefore inhibition of SNARK (Accession NP_112214.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SNARK.

[50304] SNX22 (Accession NP_079074.1) is another GAM7052 target gene, herein designated TARGET GENE. SNX22 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SNX22, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SNX22 BINDING SITE, designated SEQ ID:3382, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50305] Another function of GAM7052 is therefore inhibition of

SNX22 (Accession NP_079074.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SNX22.

[50306] SNX27 (Accession NP_112180.4) is another GAM7052 target gene, herein designated TARGET GENE. SNX27 BINDING SITE1 and SNX27 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by SNX27, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SNX27 BINDING SITE1 and SNX27 BINDING SITE2, designated SEQ ID:2903 and SEQ ID:4461 respectively, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50307] Another function of GAM7052 is therefore inhibition of SNX27 (Accession NP_112180.4) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SNX27.

[50308] Speckle-type poz protein (SPOP, Accession NP_003554.1) is another GAM7052 target gene, herein designated TARGET GENE. SPOP BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by

SPOP, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SPOP BINDING SITE, designated SEQ ID:6561, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50309] Another function of GAM7052 is therefore inhibition of Speckle-type poz protein (SPOP, Accession NP_003554.1). Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SPOP.

[50310] Serum response factor (c-fos serum response element-binding transcription factor) (SRF, Accession NP_003122.1) is another GAM7052 target gene, herein designated TARGET GENE. SRF BINDING SITE1 and SRF BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by SRF, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SRF BINDING SITE1 and SRF BINDING SITE2, designated SEQ ID:2413 and SEQ ID:1206 respectively, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also des-

ignated SEQ ID:296.

[50311] Another function of GAM7052 is therefore inhibition of Serum response factor (c-fos serum response element-binding transcription factor) (SRF, Accession NP_003122.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SRF.

[50312] Sarcalumenin (SRL, Accession XP_064152.3) is another GAM7052 target gene, herein designated TARGET GENE. SRL BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SRL, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SRL BINDING SITE, designated SEQ ID:17636, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50313] Another function of GAM7052 is therefore inhibition of Sarcalumenin (SRL, Accession XP_064152.3) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SRL.

[50314] STAF65(gamma) (Accession NP_055675.1) is another

GAM7052 target gene, herein designated TARGET GENE. STAF65(gamma) BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by STAF65(gamma), corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of STAF65(gamma) BINDING SITE, designated SEQ ID:4663, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50315] Another function of GAM7052 is therefore inhibition of STAF65(gamma) (Accession NP_055675.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with STAF65(gamma).

[50316] Stomatin (STOM, Accession NP_004090.3) is another GAM7052 target gene, herein designated TARGET GENE. STOM BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by STOM, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of STOM BINDING SITE, designated SEQ ID:18019, to the nu-

cleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50317] Another function of GAM7052 is therefore inhibition of Stomatin (STOM, Accession NP_004090.3) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with STOM.

[50318] Synaptotagmin xi (SYT11, Accession NP_689493.2) is another GAM7052 target gene, herein designated TARGET GENE. SYT11 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SYT11, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SYT11 BINDING SITE, designated SEQ ID:1187, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50319] Another function of GAM7052 is therefore inhibition of Synaptotagmin xi (SYT11, Accession NP_689493.2) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SYT11.

[50320] Synaptotagmin xiii (SYT13, Accession NP_065877.1) is

another GAM7052 target gene, herein designated TARGET GENE. SYT13 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SYT13, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SYT13 BINDING SITE, designated SEQ ID:12639, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50321] Another function of GAM7052 is therefore inhibition of Synaptotagmin xiii (SYT13, Accession NP_065877.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SYT13.

[50322] Taf7-like rna polymerase ii, tata box binding protein (tbp)-associated factor, 50kda (TAF7L, Accession NP_079161.1) is another GAM7052 target gene, herein designated TARGET GENE. TAF7L BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TAF7L, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TAF7L BINDING SITE, designated

SEQ ID:5620, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50323] Another function of GAM7052 is therefore inhibition of Taf7-like rna polymerase ii, tata box binding protein (tbp)-associated factor, 50kda (TAF7L, Accession NP_079161.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TAF7L.

[50324] Tap binding protein (tapasin) (TAPBP, Accession NP_003181.3) is another GAM7052 target gene, herein designated TARGET GENE. TAPBP BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by TAPBP, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TAPBP BINDING SITE, designated SEQ ID:2176, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50325] Another function of GAM7052 is therefore inhibition of Tap binding protein (tapasin) (TAPBP, Accession NP_003181.3), a gene which is involved in MHC class I-

restricted antigen processing. Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TAPBP.

[50326] The function of TAPBP and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM136.1.T-box 5 (TBX5, Accession NP_542448.1) is another GAM7052 target gene, herein designated TARGET GENE. TBX5 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by TBX5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TBX5 BINDING SITE, designated SEQ ID:11145, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50327] Another function of GAM7052 is therefore inhibition of T-box 5 (TBX5, Accession NP_542448.1). Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TBX5.

[50328] T-box 5 (TBX5, Accession NP_000183.2) is another

GAM7052 target gene, herein designated TARGET GENE. TBX5 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by TBX5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TBX5 BINDING SITE, designated SEQ ID:11145, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50329] Another function of GAM7052 is therefore inhibition of T-box 5 (TBX5, Accession NP_000183.2) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TBX5.

[50330] T-cell leukemia/lymphoma 6 (TCL6, Accession NP_055233.1) is another GAM7052 target gene, herein designated TARGET GENE. TCL6 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by TCL6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TCL6

BINDING SITE, designated SEQ ID:3638, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50331] Another function of GAM7052 is therefore inhibition of T-cell leukemia/lymphoma 6 (TCL6, Accession NP_055233.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TCL6.

[50332] T-cell leukemia/lymphoma 6 (TCL6, Accession NP_065575.1) is another GAM7052 target gene, herein designated TARGET GENE. TCL6 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by TCL6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TCL6 BINDING SITE, designated SEQ ID:3638, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50333] Another function of GAM7052 is therefore inhibition of T-cell leukemia/lymphoma 6 (TCL6, Accession NP_065575.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical

cal conditions associated with TCL6.

[50334] T-cell leukemia/lymphoma 6 (TCL6, Accession NP_036600.2) is another GAM7052 target gene, herein designated TARGET GENE. TCL6 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by TCL6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TCL6 BINDING SITE, designated SEQ ID:3638, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50335] Another function of GAM7052 is therefore inhibition of T-cell leukemia/lymphoma 6 (TCL6, Accession NP_036600.2) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TCL6.

[50336] T-cell leukemia/lymphoma 6 (TCL6, Accession NP_065577.2) is another GAM7052 target gene, herein designated TARGET GENE. TCL6 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by TCL6, corresponding to a target binding site such as BINDING SITE I, BINDING

SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TCL6 BINDING SITE, designated SEQ ID:3638, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50337] Another function of GAM7052 is therefore inhibition of T-cell leukemia/lymphoma 6 (TCL6, Accession NP_065577.2) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TCL6.

[50338] Telomeric repeat binding factor (nima-interacting) 1 (TERF1, Accession NP_003209.1) is another GAM7052 target gene, herein designated TARGET GENE. TERF1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by TERF1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TERF1 BINDING SITE, designated SEQ ID:18226, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50339] Another function of GAM7052 is therefore inhibition of

Telomeric repeat binding factor (nima-interacting) 1 (TERF1, Accession NP_003209.1), a gene which negatively regulates telomere length, involves in regulation of the mitotic spindle. Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TERF1.

[50340] The function of TERF1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1. Telomeric repeat binding factor (nima-interacting) 1 (TERF1, Accession NP_059523.1) is another GAM7052 target gene, herein designated TARGET GENE. TERF1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by TERF1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TERF1 BINDING SITE, designated SEQ ID:18226, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50341] Another function of GAM7052 is therefore inhibition of Telomeric repeat binding factor (nima-interacting) 1

(TERF1, Accession NP_059523.1), a gene which negatively regulates telomere length, involves in regulation of the mitotic spindle. Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TERF1.

[50342] The function of TERF1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1. Tgfb-induced factor 2 (tale family homeobox) (TGIF2, Accession NP_068581.1) is another GAM7052 target gene, herein designated TARGET GENE. TGIF2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TGIF2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TGIF2 BINDING SITE, designated SEQ ID:8013, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50343] Another function of GAM7052 is therefore inhibition of Tgfb-induced factor 2 (tale family homeobox) (TGIF2, Accession NP_068581.1). Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases

and clinical conditions associated with TGIF2.

[50344] Thyroid hormone receptor, alpha (erythroblastic leukemia viral (v-erb-a) oncogene homolog, avian) (THRA, Accession NP_003241.2) is another GAM7052 target gene, herein designated TARGET GENE. THRA BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by THRA, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of THRA BINDING SITE, designated SEQ ID:4481, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50345] Another function of GAM7052 is therefore inhibition of Thyroid hormone receptor, alpha (erythroblastic leukemia viral (v-erb-a) oncogene homolog, avian) (THRA, Accession NP_003241.2), a gene which is a high affinity receptor for thyroid hormone and therefore may be associated with Nonfunctioning pituitary adenoma. Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of Nonfunctioning pituitary adenoma, and of other diseases and clinical conditions associated with THRA.

[50346] The function of THRA and its association with various dis-

eases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM31.1. Toll-like receptor 5 (TLR5, Accession NP_003259.2) is another GAM7052 target gene, herein designated TARGET GENE. TLR5 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by TLR5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TLR5 BINDING SITE, designated SEQ ID:8290, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50347] Another function of GAM7052 is therefore inhibition of Toll-like receptor 5 (TLR5, Accession NP_003259.2), a gene which participates in the innate immune response to bacterial flagellins. Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TLR5.

[50348] The function of TLR5 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM40.1. Transmembrane, cochlear expressed, 1

(TMC1, Accession NP_619636.2) is another GAM7052 target gene, herein designated TARGET GENE. TMC1 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by TMC1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TMC1 BINDING SITE, designated SEQ ID:13103, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50349] Another function of GAM7052 is therefore inhibition of Transmembrane, cochlear expressed, 1 (TMC1, Accession NP_619636.2), a gene which is required for normal function of cochlear hair cells and therefore may be associated with Autosomal recessive nonsyndromic neurosensory deafness and autosomal dominant nonsyndromic sensorineural hearing loss . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of Autosomal recessive nonsyndromic neurosensory deafness and autosomal dominant nonsyndromic sensorineural hearing loss ., and of other diseases and clinical conditions associated with TMC1.

[50350] The function of TMC1 and its association with various dis-

eases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM136.1. Tumor necrosis factor, alpha-induced protein 2 (TNFAIP2, Accession NP_006282.2) is another GAM7052 target gene, herein designated TARGET GENE. TNFAIP2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TNFAIP2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TNFAIP2 BINDING SITE, designated SEQ ID:8132, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50351] Another function of GAM7052 is therefore inhibition of Tumor necrosis factor, alpha-induced protein 2 (TNFAIP2, Accession NP_006282.2). Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TNFAIP2.

[50352] Tumor necrosis factor receptor superfamily, member 10b (TNFRSF10B, Accession NP_671716.1) is another GAM7052 target gene, herein designated TARGET GENE. TNFRSF10B BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of

mRNA encoded by TNFRSF10B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TNFRSF10B BINDING SITE, designated SEQ ID:19950, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50353] Another function of GAM7052 is therefore inhibition of Tumor necrosis factor receptor superfamily, member 10b (TNFRSF10B, Accession NP_671716.1), a gene which forms complex that induces apoptosis. and therefore may be associated with Squamous cell carcinoma . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of Squamous cell carcinoma ., and of other diseases and clinical conditions associated with TNFRSF10B.

[50354] The function of TNFRSF10B and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1.Tumor necrosis factor receptor superfamily, member 10b (TNFRSF10B, Accession NP_003833.3) is another GAM7052 target gene, herein designated TARGET GENE. TNFRSF10B BINDING SITE is a target binding site found in the 3` untranslated region of multiple tran-

scripts of mRNA encoded by TNFRSF10B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TNFRSF10B BINDING SITE, designated SEQ ID:19950, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50355] Another function of GAM7052 is therefore inhibition of Tumor necrosis factor receptor superfamily, member 10b (TNFRSF10B, Accession NP_003833.3), a gene which forms complex that induces apoptosis. and therefore may be associated with Squamous cell carcinoma . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of Squamous cell carcinoma ., and of other diseases and clinical conditions associated with TNFRSF10B.

[50356] The function of TNFRSF10B and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1.Tumor necrosis factor receptor superfamily, member 11a, activator of nfkb (TNFRSF11A, Accession NP_003830.1) is another GAM7052 target gene, herein designated TARGET GENE. TNFRSF11A BINDING SITE is a target binding site found in the 3` untranslated

region of mRNA encoded by TNFRSF11A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TNFRSF11A BINDING SITE, designated SEQ ID:7043, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50357] Another function of GAM7052 is therefore inhibition of Tumor necrosis factor receptor superfamily, member 11a, activator of nfkb (TNFRSF11A, Accession NP_003830.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TNFRSF11A.

[50358] Translocase of outer mitochondrial membrane 40 homolog (yeast) (TOMM40, Accession NP_006105.1) is another GAM7052 target gene, herein designated TARGET GENE. TOMM40 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TOMM40, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TOMM40 BINDING SITE, designated SEQ ID:15424, to the nucleotide sequence of GAM7052

RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50359] Another function of GAM7052 is therefore inhibition of Translocase of outer mitochondrial membrane 40 homolog (yeast) (TOMM40, Accession NP_006105.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TOMM40.

[50360] Torsin family 1, member b (torsin b) (TOR1B, Accession NP_055321.1) is another GAM7052 target gene, herein designated TARGET GENE. TOR1B BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TOR1B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TOR1B BINDING SITE, designated SEQ ID:11224, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50361] Another function of GAM7052 is therefore inhibition of Torsin family 1, member b (torsin b) (TOR1B, Accession NP_055321.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical

cal conditions associated with TOR1B.

[50362] Thiopurine s-methyltransferase (TPMT, Accession NP_000358.1) is another GAM7052 target gene, herein designated TARGET GENE. TPMT BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TPMT, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TPMT BINDING SITE, designated SEQ ID:1523, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50363] Another function of GAM7052 is therefore inhibition of Thiopurine s-methyltransferase (TPMT, Accession NP_000358.1), a gene which catalyzes the s- methylation of thiopurine drugs such as 6- mercaptopurine. and therefore may be associated with Thiopurine s- methyl-transferase polymorphism. Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of Thiopurine s- methyltransferase polymorphism, and of other diseases and clinical conditions associated with TPMT.

[50364] The function of TPMT and its association with various dis-

eases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM130.1. Tryptase gamma 1 (TPSG1, Accession NP_036599.1) is another GAM7052 target gene, herein designated TARGET GENE. TPSG1 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by TPSG1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TPSG1 BINDING SITE, designated SEQ ID:13903, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50365] Another function of GAM7052 is therefore inhibition of Tryptase gamma 1 (TPSG1, Accession NP_036599.1). Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TPSG1.

[50366] Tnf receptor-associated factor 5 (TRAF5, Accession NP_004610.1) is another GAM7052 target gene, herein designated TARGET GENE. TRAF5 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by TRAF5, correspond-

ing to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TRAF5 BINDING SITE, designated SEQ ID:12522, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50367] Another function of GAM7052 is therefore inhibition of Tnf receptor-associated factor 5 (TRAF5, Accession NP_004610.1), a gene which Member of a family of proteins that interact with TNF receptors; binds the lymphotoxin beta receptor (LTBR). Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TRAF5.

[50368] The function of TRAF5 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM69.2. Tnf receptor-associated factor 5 (TRAF5, Accession NP_665702.1) is another GAM7052 target gene, herein designated TARGET GENE. TRAF5 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by TRAF5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of TRAF5 BINDING SITE, designated SEQ ID:12522, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50369] Another function of GAM7052 is therefore inhibition of Tnf receptor-associated factor 5 (TRAF5, Accession NP_665702.1), a gene which Member of a family of proteins that interact with TNF receptors; binds the lymphotoxin beta receptor (LTBR). Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TRAF5.

[50370] The function of TRAF5 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM69.2. Tripartite motif-containing 16 (TRIM16, Accession NP_006461.2) is another GAM7052 target gene, herein designated TARGET GENE. TRIM16 BINDING SITE1 and TRIM16 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by TRIM16, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TRIM16 BINDING SITE1 and TRIM16 BINDING SITE2, desig-

nated SEQ ID:18408 and SEQ ID:3032 respectively, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50371] Another function of GAM7052 is therefore inhibition of Tripartite motif-containing 16 (TRIM16, Accession NP_006461.2) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TRIM16.

[50372] Tripartite motif-containing 5 (TRIM5, Accession NP_149023.1) is another GAM7052 target gene, herein designated TARGET GENE. TRIM5 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by TRIM5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TRIM5 BINDING SITE, designated SEQ ID:3638, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50373] Another function of GAM7052 is therefore inhibition of Tripartite motif-containing 5 (TRIM5, Accession NP_149023.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical

cal conditions associated with TRIM5.

[50374] Tripartite motif-containing 6 (TRIM6, Accession NP_477514.1) is another GAM7052 target gene, herein designated TARGET GENE. TRIM6 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TRIM6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TRIM6 BINDING SITE, designated SEQ ID:17246, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50375] Another function of GAM7052 is therefore inhibition of Tripartite motif-containing 6 (TRIM6, Accession NP_477514.1). Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TRIM6.

[50376] Transient receptor potential cation channel, subfamily v, member 1 (TRPV1, Accession NP_542435.1) is another GAM7052 target gene, herein designated TARGET GENE. TRPV1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by TRPV1, corresponding to a target binding site

such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TRPV1 BINDING SITE, designated SEQ ID:18293, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50377] Another function of GAM7052 is therefore inhibition of Transient receptor potential cation channel, subfamily v, member 1 (TRPV1, Accession NP_542435.1), a gene which functions as a receptor for capsaicin. Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TRPV1.

[50378] The function of TRPV1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM130.1. Transient receptor potential cation channel, subfamily v, member 1 (TRPV1, Accession NP_542436.1) is another GAM7052 target gene, herein designated TARGET GENE. TRPV1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by TRPV1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the comple-

mentarity of the nucleotide sequences of TRPV1 BINDING SITE, designated SEQ ID:18293, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50379] Another function of GAM7052 is therefore inhibition of Transient receptor potential cation channel, subfamily v, member 1 (TRPV1, Accession NP_542436.1), a gene which functions as a receptor for capsaicin. Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TRPV1.

[50380] The function of TRPV1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM130.1. Transient receptor potential cation channel, subfamily v, member 1 (TRPV1, Accession NP_061197.3) is another GAM7052 target gene, herein designated TARGET GENE. TRPV1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by TRPV1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TRPV1 BINDING SITE, designated SEQ ID:18293, to the nucleotide se-

quence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50381] Another function of GAM7052 is therefore inhibition of Transient receptor potential cation channel, subfamily v, member 1 (TRPV1, Accession NP_061197.3), a gene which functions as a receptor for capsaicin. Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TRPV1.

[50382] The function of TRPV1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM130.1. Transient receptor potential cation channel, subfamily v, member 1 (TRPV1, Accession NP_542437.1) is another GAM7052 target gene, herein designated TARGET GENE. TRPV1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by TRPV1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TRPV1 BINDING SITE, designated SEQ ID:18293, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50383] Another function of GAM7052 is therefore inhibition of Transient receptor potential cation channel, subfamily v, member 1 (TRPV1, Accession NP_542437.1), a gene which functions as a receptor for capsaicin. Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TRPV1.

[50384] The function of TRPV1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM130.1.TSAP6 (Accession NP_060704.1) is another GAM7052 target gene, herein designated TARGET GENE. TSAP6 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by TSAP6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TSAP6 BINDING SITE, designated SEQ ID:12675, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50385] Another function of GAM7052 is therefore inhibition of TSAP6 (Accession NP_060704.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TSAP6.

[50386] TU12B1-TY (Accession NP_057659.1) is another GAM7052 target gene, herein designated TARGET GENE. TU12B1-TY BINDING SITE1 through TU12B1-TY BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by TU12B1-TY, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TU12B1-TY BINDING SITE1 through TU12B1-TY BINDING SITE3, designated SEQ ID:2107, SEQ ID:2823 and SEQ ID:8615 respectively, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50387] Another function of GAM7052 is therefore inhibition of TU12B1-TY (Accession NP_057659.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TU12B1-TY.

[50388] TUCAN (Accession NP_055774.1) is another GAM7052 target gene, herein designated TARGET GENE. TUCAN BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TUCAN, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of TUCAN BINDING SITE, designated SEQ ID:16723, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50389] Another function of GAM7052 is therefore inhibition of TUCAN (Accession NP_055774.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TUCAN.

[50390] Thioredoxin-like 2 (TXNL2, Accession NP_006532.1) is another GAM7052 target gene, herein designated TARGET GENE. TXNL2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TXNL2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TXNL2 BINDING SITE, designated SEQ ID:9280, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50391] Another function of GAM7052 is therefore inhibition of Thioredoxin-like 2 (TXNL2, Accession NP_006532.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TXNL2.

[50392] UBF-fl (Accession NP_116217.1) is another GAM7052 target gene, herein designated TARGET GENE. UBF-fl BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by UBF-fl, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of UBF-fl BINDING SITE, designated SEQ ID:16551, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50393] Another function of GAM7052 is therefore inhibition of UBF-fl (Accession NP_116217.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with UBF-fl.

[50394] Uroplakin 1b (UPK1B, Accession NP_008883.1) is another GAM7052 target gene, herein designated TARGET GENE. UPK1B BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by UPK1B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of UPK1B BINDING SITE, designated SEQ ID:16344, to the nucleotide sequence of GAM7052 RNA, herein designated

GAM RNA, also designated SEQ ID:296.

[50395] Another function of GAM7052 is therefore inhibition of Uroplakin 1b (UPK1B, Accession NP_008883.1), a gene which strengthens and stabilizes the urothelial apical surface of the asymmetric unit membrane of mammalian bladder epithelium. Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with UPK1B.

[50396] The function of UPK1B and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM223.1.VDU1 (Accession NP_055832.2) is another GAM7052 target gene, herein designated TARGET GENE. VDU1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by VDU1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of VDU1 BINDING SITE, designated SEQ ID:9640, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50397] Another function of GAM7052 is therefore inhibition of VDU1 (Accession NP_055832.2) . Accordingly, utilities of

GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with VDU1.

[50398] Von hippel–lindau syndrome (VHL, Accession NP_000542.1) is another GAM7052 target gene, herein designated TARGET GENE. VHL BINDING SITE1 and VHL BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by VHL, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of VHL BINDING SITE1 and VHL BINDING SITE2, designated SEQ ID:19938 and SEQ ID:17725 respectively, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50399] Another function of GAM7052 is therefore inhibition of Von hippel–lindau syndrome (VHL, Accession NP_000542.1), a gene which may control rna stability through the selective degradation of rna– bound proteins. and therefore is associated with Von hippel– lindau disease. Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of Von hippel– lindau disease, and of other diseases and clinical conditions associated with VHL.

[50400] The function of VHL and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM72.1. Vasoactive intestinal peptide receptor 2 (VIPR2, Accession NP_003373.2) is another GAM7052 target gene, herein designated TARGET GENE. VIPR2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by VIPR2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of VIPR2 BINDING SITE, designated SEQ ID:8429, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50401] Another function of GAM7052 is therefore inhibition of Vasoactive intestinal peptide receptor 2 (VIPR2, Accession NP_003373.2). Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with VIPR2.

[50402] Vacuolar protein sorting 33a (yeast) (VPS33A, Accession NP_075067.2) is another GAM7052 target gene, herein designated TARGET GENE. VPS33A BINDING SITE is a target binding site found in the 3' untranslated region of

mRNA encoded by VPS33A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of VPS33A BINDING SITE, designated SEQ ID:18973, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50403] Another function of GAM7052 is therefore inhibition of Vacuolar protein sorting 33a (yeast) (VPS33A, Accession NP_075067.2) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with VPS33A.

[50404] Williams-beuren syndrome chromosome region 23 (WBSCR23, Accession NP_079318.1) is another GAM7052 target gene, herein designated TARGET GENE. WBSCR23 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by WBSCR23, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of WBSCR23 BINDING SITE, designated SEQ ID:17673, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50405] Another function of GAM7052 is therefore inhibition of Williams-beuren syndrome chromosome region 23 (WBSCR23, Accession NP_079318.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with WB-SCR23.

[50406] ZFP30 (Accession NP_055713.1) is another GAM7052 target gene, herein designated TARGET GENE. ZFP30 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZFP30, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZFP30 BINDING SITE, designated SEQ ID:2558, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50407] Another function of GAM7052 is therefore inhibition of ZFP30 (Accession NP_055713.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZFP30.

[50408] Zic family member 2 (odd-paired homolog, drosophila) (ZIC2, Accession NP_009060.2) is another GAM7052 target gene, herein designated TARGET GENE. ZIC2 BINDING

SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZIC2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZIC2 BINDING SITE, designated SEQ ID:5098, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50409] Another function of GAM7052 is therefore inhibition of Zic family member 2 (odd-paired homolog, drosophila) (ZIC2, Accession NP_009060.2) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZIC2.

[50410] ZMYND17 (Accession NP_848546.1) is another GAM7052 target gene, herein designated TARGET GENE. ZMYND17 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZMYND17, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZMYND17 BINDING SITE, designated SEQ ID:13356, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50411] Another function of GAM7052 is therefore inhibition of ZMYND17 (Accession NP_848546.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZMYND17.

[50412] Zinc finger protein 137 (clone phz-30) (ZNF137, Accession NP_003429.1) is another GAM7052 target gene, herein designated TARGET GENE. ZNF137 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZNF137, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF137 BINDING SITE, designated SEQ ID:11225, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50413] Another function of GAM7052 is therefore inhibition of Zinc finger protein 137 (clone phz-30) (ZNF137, Accession NP_003429.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF137.

[50414] Zinc finger protein 253 (ZNF253, Accession NP_066385.1) is another GAM7052 target gene, herein designated TAR-

GET GENE. ZNF253 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZNF253, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF253 BINDING SITE, designated SEQ ID:3638, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50415] Another function of GAM7052 is therefore inhibition of Zinc finger protein 253 (ZNF253, Accession NP_066385.1). Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF253.

[50416] Zinc finger protein 264 (ZNF264, Accession NP_003408.1) is another GAM7052 target gene, herein designated TARGET GENE. ZNF264 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZNF264, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF264 BINDING SITE, designated SEQ ID:9691, to the nucleotide sequence of GAM7052

RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50417] Another function of GAM7052 is therefore inhibition of Zinc finger protein 264 (ZNF264, Accession NP_003408.1). Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF264.

[50418] Zinc finger protein 273 (ZNF273, Accession XP_088082.1) is another GAM7052 target gene, herein designated TARGET GENE. ZNF273 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZNF273, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF273 BINDING SITE, designated SEQ ID:12971, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50419] Another function of GAM7052 is therefore inhibition of Zinc finger protein 273 (ZNF273, Accession XP_088082.1). Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF273.

[50420] Zinc finger protein 305 (ZNF305, Accession NP_055539.1) is another GAM7052 target gene, herein designated TARGET GENE. ZNF305 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZNF305, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF305 BINDING SITE, designated SEQ ID:16268, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50421] Another function of GAM7052 is therefore inhibition of Zinc finger protein 305 (ZNF305, Accession NP_055539.1). Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF305.

[50422] ZNF432 (Accession NP_055465.1) is another GAM7052 target gene, herein designated TARGET GENE. ZNF432 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZNF432, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

ZNF432 BINDING SITE, designated SEQ ID:12735, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50423] Another function of GAM7052 is therefore inhibition of ZNF432 (Accession NP_055465.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF432.

[50424] ZNF440 (Accession NP_689570.1) is another GAM7052 target gene, herein designated TARGET GENE. ZNF440 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZNF440, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF440 BINDING SITE, designated SEQ ID:13692, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50425] Another function of GAM7052 is therefore inhibition of ZNF440 (Accession NP_689570.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF440.

[50426] Zinc finger protein 70 (cos17) (ZNF70, Accession NP_852101.1) is another GAM7052 target gene, herein designated TARGET GENE. ZNF70 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by ZNF70, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF70 BINDING SITE, designated SEQ ID:19261, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50427] Another function of GAM7052 is therefore inhibition of Zinc finger protein 70 (cos17) (ZNF70, Accession NP_852101.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF70.

[50428] Zinc finger protein 70 (cos17) (ZNF70, Accession NP_068735.1) is another GAM7052 target gene, herein designated TARGET GENE. ZNF70 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by ZNF70, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates

the complementarity of the nucleotide sequences of ZNF70 BINDING SITE, designated SEQ ID:19261, to the nucleotide sequence of GAM7052 RNA, herein designated GAM RNA, also designated SEQ ID:296.

[50429] Another function of GAM7052 is therefore inhibition of Zinc finger protein 70 (cos17) (ZNF70, Accession NP_068735.1) . Accordingly, utilities of GAM7052 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF70.

[50430]

[50431] Fig. 8 further provides a conceptual description of a novel bioinformatically detected of the present invention, referred to here as Genomic Address Messenger 7080 (GAM7080), which modulates expression of respective target genes thereof, the function and utility of which target genes is known in the art.

[50432] GAM7080 is a novel bioinformatically detected regulatory, non protein coding, micro RNA (miRNA) gene. The method by which GAM7080 was detected is described hereinabove with reference to Figs. 8-15.

[50433] GAM7080 gene, herein designated GAM GENE, and GAM7080 target gene, herein designated TARGET GENE, are human genes contained in the human genome.

[50434] GAM7080 gene encodes a GAM7080 precursor RNA, herein designated GAM PRECURSOR RNA. Similar to other miRNA genes, and unlike most ordinary genes, GAM7080 precursor RNA does not encode a protein. A nucleotide sequence identical or highly similar to the nucleotide sequence of GAM7080 precursor RNA is designated SEQ ID:183, and is provided hereinbelow with reference to the sequence listing part.

[50435] GAM7080 precursor RNA folds onto itself, forming GAM7080 folded precursor RNA, herein designated GAM FOLDED PRECURSOR RNA, which has a two-dimensional `hairpin structure`. As is well known in the art, this `hairpin structure`, is typical of RNA encoded by miRNA genes, and is due to the fact that the nucleotide sequence of the first half of the RNA encoded by a miRNA gene is an accurate or partial inversed-reversed sequence of the nucleotide sequence of the second half thereof.

[50436] GAM7080 precursor RNA folds onto itself, forming GAM7080 folded precursor RNA, herein designated GAM FOLDED PRECURSOR RNA, which has a two-dimensional `hairpin structure`. As is well known in the art, this `hairpin structure`, is typical of RNA encoded by miRNA genes, and is due to the fact that the nucleotide sequence

of the first half of the RNA encoded by a miRNA gene is an accurate or partial reverse-complementary sequence of the nucleotide sequence of the second half thereof.

[50437] Nucleotide sequence of GAM7080 precursor RNA, designated SEQ-ID: 183, and a schematic representation of a predicted secondary folding of GAM7080 folded precursor RNA are further described with reference to Table 2, hereby incorporated by reference.

[50438] An enzyme complex designated DICER COMPLEX, `dices` the GAM7080 folded precursor RNA into GAM7080 RNA, herein designated GAM RNA, a single stranded ~22 nt long RNA segment. As is known in the art, `dicing` of a hairpin structured RNA precursor product into a short ~22nt RNA segment is catalyzed by an enzyme complex comprising an enzyme called Dicer together with other necessary proteins. A probable (GAM Prediction Accuracy Group: C) nucleotide sequence of GAM7080 RNA is designated SEQ ID:399, and is provided hereinbelow with references to the sequence listing part and Table 3, hereby incorporated by reference.

[50439] GAM7080 target gene, herein designated TARGET GENE, encodes a corresponding messenger RNA, GAM7080 target RNA, herein designated GAM TARGET RNA. GAM7080

target RNA comprises three regions, as is typical of mRNA of a protein coding gene: a 5' untranslated region, a protein coding region and a 3' untranslated region, designated 5'UTR, PROTEIN CODING and 3'UTR respectively.

[50440] GAM7080 RNA, herein designated GAM RNA, binds complementarily to one or more target binding sites located in untranslated regions of GAM7080 target RNA, herein designated GAM TARGET RNA. This complementary binding is due to the fact that the nucleotide sequence of GAM7080 RNA is an accurate or a partial inversed-reversed sequence of the nucleotide sequence of each of the target binding sites. As an illustration, Fig. 8 shows three such target binding sites, designated BINDING SITE I, BINDING SITE II and BINDING SITE III respectively. It is appreciated that the number of target binding sites shown in Fig. 8 is meant as an illustration only, and is not meant to be limiting. GAM7080 RNA may have a different number of target binding sites in untranslated regions of a GAM7080 target RNA. It is further appreciated that while Fig. 8 depicts target binding sites in the 3'UTR region, this is meant as an example only. These target binding sites may be located in the 3'UTR region, the 5'UTR region, or in both 3'UTR and 5'UTR regions.

[50441] The complementary binding of GAM7080 RNA, herein designated GAM RNA, to target binding sites on GAM7080 target RNA, herein designated GAM TARGET RNA, such as BINDING SITE I, BINDING SITE II and BINDING SITE III, inhibits translation of GAM7080 target RNA into GAM7080 target protein, herein designated GAM TARGET PROTEIN. GAM target protein is therefore outlined by a broken line.

[50442] It is appreciated that GAM7080 target gene, herein designated TARGET GENE, in fact represents a plurality of GAM7080 target genes. The mRNA of each one of this plurality of GAM7080 target genes comprises one or more target binding sites, each having a nucleotide sequence which is at least partly complementary to GAM7080 RNA, herein designated GAM RNA, and which when bound by GAM7080 RNA causes inhibition of translation of respective one or more GAM7080 target proteins.

[50443] It is further appreciated by one skilled in the art that the mode of translational inhibition illustrated by Fig. 8 with specific reference to translational inhibition exerted by GAM7080 gene, herein designated GAM GENE, on one or more GAM7080 target genes, herein collectively designated TARGET GENE, is common to other known miRNA genes. As mentioned hereinabove with reference to the

background section, although a specific complementary binding site has been demonstrated only for some of the known miRNA genes (primarily Lin-4 and Let-7), all other recently discovered miRNA genes are also believed by those skilled in the art to modulate expression of other genes by complementary binding, although specific complementary binding sites of these other miRNA genes have not yet been found (Ruvkun G., Perspective: Glimpses of a tiny RNA world, Science 294,779 (2001)).

[50444] It is appreciated that specific functions and accordingly utilities of GAM7080 correlate with, and may be deduced from, the identity of the target genes which GAM7080 binds and inhibits, and the function of these target genes, as elaborated hereinbelow.

[50445]

[50446]

[50447] Alpha-1-b glycoprotein (A1BG, Accession NP_570602.2) is a GAM7080 target gene, herein designated TARGET GENE. A1BG BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by A1BG, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4

illustrates the complementarity of the nucleotide sequences of A1BG BINDING SITE, designated SEQ ID:10195, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50448] A function of GAM7080 is therefore inhibition of Alpha-1-b glycoprotein (A1BG, Accession NP_570602.2), a gene which a plasma protein of unknown function. Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with A1BG.

[50449] The function of A1BG and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM130.1.Atp-binding cassette, sub-family b (mdr/tap), member 9 (ABCB9, Accession NP_062571.1) is another GAM7080 target gene, herein designated TARGET GENE. ABCB9 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by ABCB9, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ABCB9 BINDING SITE, designated SEQ ID:10223, to the nucleotide sequence of

GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50450] Another function of GAM7080 is therefore inhibition of Atp-binding cassette, sub-family b (mdr/tap), member 9 (ABCB9, Accession NP_062571.1), a gene which ATP binding cassette transporter B9; has transmembrane domain, nucleotide-binding domain with Walker motifs. Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ABCB9.

[50451] The function of ABCB9 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM47.1. Atp-binding cassette, sub-family b (mdr/tap), member 9 (ABCB9, Accession NP_062570.1) is another GAM7080 target gene, herein designated TARGET GENE. ABCB9 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by ABCB9, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ABCB9 BINDING SITE, designated SEQ ID:10223, to the nucleotide sequence of

GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50452] Another function of GAM7080 is therefore inhibition of Atp-binding cassette, sub-family b (mdr/tap), member 9 (ABCB9, Accession NP_062570.1), a gene which ATP binding cassette transporter B9; has transmembrane domain, nucleotide-binding domain with Walker motifs. Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ABCB9.

[50453] The function of ABCB9 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM47.1. ACTR10 (Accession NP_060947.1) is another GAM7080 target gene, herein designated TARGET GENE. ACTR10 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by ACTR10, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ACTR10 BINDING SITE, designated SEQ ID:11903, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50454] Another function of GAM7080 is therefore inhibition of ACTR10 (Accession NP_060947.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ACTR10.

[50455] Adrenergic, alpha-2b-, receptor (ADRA2B, Accession NP_000673.1) is another GAM7080 target gene, herein designated TARGET GENE. ADRA2B BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ADRA2B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ADRA2B BINDING SITE, designated SEQ ID:7602, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50456] Another function of GAM7080 is therefore inhibition of Adrenergic, alpha-2b-, receptor (ADRA2B, Accession NP_000673.1), a gene which mediate the catecholamine-induced inhibition of adenylate cyclase through the action of g proteins. Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ADRA2B.

[50457] The function of ADRA2B and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM264.1. Adaptor-related protein complex 3, sigma 2 subunit (AP3S2, Accession NP_005820.1) is another GAM7080 target gene, herein designated TARGET GENE. AP3S2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by AP3S2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of AP3S2 BINDING SITE, designated SEQ ID:5422, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50458] Another function of GAM7080 is therefore inhibition of Adaptor-related protein complex 3, sigma 2 subunit (AP3S2, Accession NP_005820.1). Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with AP3S2.

[50459] Rho gtpase activating protein 12 (ARHGAP12, Accession NP_060757.4) is another GAM7080 target gene, herein designated TARGET GENE. ARHGAP12 BINDING SITE is a target binding site found in the 3' untranslated region of

mRNA encoded by ARHGAP12, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ARHGAP12 BINDING SITE, designated SEQ ID:13878, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50460] Another function of GAM7080 is therefore inhibition of Rho gtpase activating protein 12 (ARHGAP12, Accession NP_060757.4) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ARHGAP12.

[50461] Attractin (ATRN, Accession NP_647537.1) is another GAM7080 target gene, herein designated TARGET GENE. ATRN BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by ATRN, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ATRN BINDING SITE, designated SEQ ID:4659, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50462] Another function of GAM7080 is therefore inhibition of Attractin (ATRN, Accession NP_647537.1), a gene which is involved in the initial immune cell clustering during inflammatory response. Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ATRN.

[50463] The function of ATRN and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM47.1.Btb and cnc homology 1, basic leucine zipper transcription factor 2 (BACH2, Accession NP_068585.1) is another GAM7080 target gene, herein designated TARGET GENE. BACH2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by BACH2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BACH2 BINDING SITE, designated SEQ ID:16479, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50464] Another function of GAM7080 is therefore inhibition of Btb and cnc homology 1, basic leucine zipper transcrip-

tion factor 2 (BACH2, Accession NP_068585.1), a gene which acts as repressor or activator, binds to maf recognition elements and therefore may be associated with Non-hodgkin lymphoma. Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of Non-hodgkin lymphoma, and of other diseases and clinical conditions associated with BACH2.

[50465] The function of BACH2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM44.1. Beaded filament structural protein 2, phakinin (BFSP2, Accession NP_003562.1) is another GAM7080 target gene, herein designated TARGET GENE. BFSP2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by BFSP2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BFSP2 BINDING SITE, designated SEQ ID:3480, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50466] Another function of GAM7080 is therefore inhibition of Beaded filament structural protein 2, phakinin (BFSP2, Ac-

cession NP_003562.1), a gene which is an intermediate filament protein that interacts with CP115 (BFSP1) to form beaded filament and therefore is associated with Juvenile-onset cataract. Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of Juvenile-onset cataract, and of other diseases and clinical conditions associated with BFSP2.

[50467] The function of BFSP2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM1089.1. Bridging integrator 3 (BIN3, Accession NP_061158.1) is another GAM7080 target gene, herein designated TARGET GENE. BIN3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by BIN3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BIN3 BINDING SITE, designated SEQ ID:3365, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50468] Another function of GAM7080 is therefore inhibition of Bridging integrator 3 (BIN3, Accession NP_061158.1). Ac-

cordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BIN3.

[50469] B lymphoma mo-mlv insertion region (mouse) (BMI1, Accession NP_005171.4) is another GAM7080 target gene, herein designated TARGET GENE. BMI1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by BMI1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BMI1 BINDING SITE, designated SEQ ID:9667, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50470] Another function of GAM7080 is therefore inhibition of B lymphoma mo-mlv insertion region (mouse) (BMI1, Accession NP_005171.4). Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BMI1.

[50471] Bassoon (presynaptic cytomatrix protein) (BSN, Accession NP_003449.1) is another GAM7080 target gene, herein designated TARGET GENE. BSN BINDING SITE is a target binding site found in the 3' untranslated region of mRNA

encoded by BSN, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BSN BINDING SITE, designated SEQ ID:13114, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50472] Another function of GAM7080 is therefore inhibition of Bassoon (presynaptic cytomatrix protein) (BSN, Accession NP_003449.1), a gene which may be involved in cytomatrix organization at the site of neurotransmitter release and therefore may be associated with Multiple system atrophy (msa). Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of Multiple system atrophy (msa), and of other diseases and clinical conditions associated with BSN.

[50473] The function of BSN and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM146.1.C14orf132 (Accession NP_064600.1) is another GAM7080 target gene, herein designated TARGET GENE. C14orf132 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by

C14orf132, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C14orf132 BINDING SITE, designated SEQ ID:16767, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50474] Another function of GAM7080 is therefore inhibition of C14orf132 (Accession NP_064600.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C14orf132.

[50475] Chromosome 14 open reading frame 35 (C14orf35, Accession XP_058661.2) is another GAM7080 target gene, herein designated TARGET GENE. C14orf35 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by C14orf35, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C14orf35 BINDING SITE, designated SEQ ID:7617, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50476] Another function of GAM7080 is therefore inhibition of Chromosome 14 open reading frame 35 (C14orf35, Accession XP_058661.2) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C14orf35.

[50477] C17orf35 (Accession NP_003867.1) is another GAM7080 target gene, herein designated TARGET GENE. C17orf35 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by C17orf35, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C17orf35 BINDING SITE, designated SEQ ID:8416, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50478] Another function of GAM7080 is therefore inhibition of C17orf35 (Accession NP_003867.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C17orf35.

[50479] C1orf38 (Accession NP_004839.1) is another GAM7080 target gene, herein designated TARGET GENE. C1orf38 BINDING SITE is a target binding site found in the 3' un-

translated region of mRNA encoded by C1orf38, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C1orf38 BINDING SITE, designated SEQ ID:9052, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50480] Another function of GAM7080 is therefore inhibition of C1orf38 (Accession NP_004839.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C1orf38.

[50481] Chromosome 20 open reading frame 12 (C20orf12, Accession NP_060622.2) is another GAM7080 target gene, herein designated TARGET GENE. C20orf12 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by C20orf12, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C20orf12 BINDING SITE, designated SEQ ID:14702, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50482] Another function of GAM7080 is therefore inhibition of Chromosome 20 open reading frame 12 (C20orf12, Accession NP_060622.2) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C20orf12.

[50483] Chromosome 9 open reading frame 14 (C9orf14, Accession XP_098859.2) is another GAM7080 target gene, herein designated TARGET GENE. C9orf14 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C9orf14, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C9orf14 BINDING SITE, designated SEQ ID:2384, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50484] Another function of GAM7080 is therefore inhibition of Chromosome 9 open reading frame 14 (C9orf14, Accession XP_098859.2) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C9orf14.

[50485] CABIN1 (Accession NP_036427.1) is another GAM7080 target gene, herein designated TARGET GENE. CABIN1

BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by CABIN1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CABIN1 BINDING SITE, designated SEQ ID:4584, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50486] Another function of GAM7080 is therefore inhibition of CABIN1 (Accession NP_036427.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CABIN1.

[50487] Calbindin 2, 29kda (calretinin) (CALB2, Accession NP_001731.1) is another GAM7080 target gene, herein designated TARGET GENE. CALB2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CALB2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CALB2 BINDING SITE, designated SEQ ID:14269, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50488] Another function of GAM7080 is therefore inhibition of Calbindin 2, 29kda (calretinin) (CALB2, Accession NP_001731.1), a gene which plays a major role at the network level in cerebellar physiology. Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CALB2.

[50489] The function of CALB2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM842.2. Calbindin 2, 29kda (calretinin) (CALB2, Accession NP_009019.1) is another GAM7080 target gene, herein designated TARGET GENE. CALB2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CALB2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CALB2 BINDING SITE, designated SEQ ID:14269, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50490] Another function of GAM7080 is therefore inhibition of Calbindin 2, 29kda (calretinin) (CALB2, Accession NP_009019.1), a gene which plays a major role at the net-

work level in cerebellar physiology. Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CALB2.

[50491] The function of CALB2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM842.2.Calbindin 2, 29kda (calretinin) (CALB2, Accession NP_009018.1) is another GAM7080 target gene, herein designated TARGET GENE. CALB2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CALB2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CALB2 BINDING SITE, designated SEQ ID:14269, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50492] Another function of GAM7080 is therefore inhibition of Calbindin 2, 29kda (calretinin) (CALB2, Accession NP_009018.1), a gene which plays a major role at the network level in cerebellar physiology. Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CALB2.

[50493] The function of CALB2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM842.2. Calcium/calmodulin-dependent protein kinase (cam kinase) ii gamma (CAMK2G, Accession NP_751910.1) is another GAM7080 target gene, herein designated TARGET GENE. CAMK2G BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CAMK2G, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CAMK2G BINDING SITE, designated SEQ ID:8935, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50494] Another function of GAM7080 is therefore inhibition of Calcium/calmodulin-dependent protein kinase (cam kinase) ii gamma (CAMK2G, Accession NP_751910.1). Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CAMK2G.

[50495] Calcium/calmodulin-dependent protein kinase (cam kinase) ii gamma (CAMK2G, Accession NP_751911.1) is an-

other GAM7080 target gene, herein designated TARGET GENE. CAMK2G BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CAMK2G, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CAMK2G BINDING SITE, designated SEQ ID:8935, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50496] Another function of GAM7080 is therefore inhibition of Calcium/calmodulin-dependent protein kinase (cam kinase) ii gamma (CAMK2G, Accession NP_751911.1). Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CAMK2G.

[50497] Calcium/calmodulin-dependent protein kinase (cam kinase) ii gamma (CAMK2G, Accession NP_751909.1) is another GAM7080 target gene, herein designated TARGET GENE. CAMK2G BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CAMK2G, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or

BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CAMK2G BINDING SITE, designated SEQ ID:8935, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50498] Another function of GAM7080 is therefore inhibition of Calcium/calmodulin-dependent protein kinase (cam kinase) ii gamma (CAMK2G, Accession NP_751909.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CAMK2G.

[50499] Calcium/calmodulin-dependent protein kinase (cam kinase) ii gamma (CAMK2G, Accession NP_751912.1) is another GAM7080 target gene, herein designated TARGET GENE. CAMK2G BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CAMK2G, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CAMK2G BINDING SITE, designated SEQ ID:8935, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50500] Another function of GAM7080 is therefore inhibition of Calcium/calmodulin-dependent protein kinase (cam kinase) ii gamma (CAMK2G, Accession NP_751912.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CAMK2G.

[50501] Calcium/calmodulin-dependent protein kinase (cam kinase) ii gamma (CAMK2G, Accession NP_001213.2) is another GAM7080 target gene, herein designated TARGET GENE. CAMK2G BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CAMK2G, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CAMK2G BINDING SITE, designated SEQ ID:8935, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50502] Another function of GAM7080 is therefore inhibition of Calcium/calmodulin-dependent protein kinase (cam kinase) ii gamma (CAMK2G, Accession NP_001213.2) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions as-

sociated with CAMK2G.

[50503] Calcium/calmodulin-dependent protein kinase (cam kinase) ii gamma (CAMK2G, Accession NP_751913.1) is another GAM7080 target gene, herein designated TARGET GENE. CAMK2G BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CAMK2G, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CAMK2G BINDING SITE, designated SEQ ID:8935, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50504] Another function of GAM7080 is therefore inhibition of Calcium/calmodulin-dependent protein kinase (cam kinase) ii gamma (CAMK2G, Accession NP_751913.1). Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CAMK2G.

[50505] Calpastatin (CAST, Accession NP_775085.1) is another GAM7080 target gene, herein designated TARGET GENE. CAST BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA en-

coded by CAST, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CAST BINDING SITE, designated SEQ ID:6367, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50506] Another function of GAM7080 is therefore inhibition of Calpastatin (CAST, Accession NP_775085.1), a gene which is the natural inhibitor of calpain. and therefore may be associated with Rheumatic diseases. Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of Rheumatic diseases., and of other diseases and clinical conditions associated with CAST.

[50507] The function of CAST and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM893.1.Chromobox homolog 1 (hp1 beta homolog drosophila) (CBX1, Accession NP_006798.1) is another GAM7080 target gene, herein designated TARGET GENE. CBX1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CBX1, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CBX1 BINDING SITE, designated SEQ ID:1246, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50508] Another function of GAM7080 is therefore inhibition of Chromobox homolog 1 (hp1 beta homolog drosophila) (CBX1, Accession NP_006798.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CBX1.

[50509] Cdc14 cell division cycle 14 homolog b (s. cerevisiae) (CDC14B, Accession NP_201588.1) is another GAM7080 target gene, herein designated TARGET GENE. CDC14B BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CDC14B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CDC14B BINDING SITE, designated SEQ ID:14202, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50510] Another function of GAM7080 is therefore inhibition of

Cdc14 cell division cycle 14 homolog b (*s. cerevisiae*) (CDC14B, Accession NP_201588.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CDC14B.

[50511] Cdc14 cell division cycle 14 homolog b (*s. cerevisiae*) (CDC14B, Accession NP_003662.1) is another GAM7080 target gene, herein designated TARGET GENE. CDC14B BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CDC14B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CDC14B BINDING SITE, designated SEQ ID:14202, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50512] Another function of GAM7080 is therefore inhibition of Cdc14 cell division cycle 14 homolog b (*s. cerevisiae*) (CDC14B, Accession NP_003662.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CDC14B.

[50513] CDK11 (Accession XP_166324.1) is another GAM7080 target gene, herein designated TARGET GENE. CDK11 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CDK11, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CDK11 BINDING SITE, designated SEQ ID:15392, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50514] Another function of GAM7080 is therefore inhibition of CDK11 (Accession XP_166324.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CDK11.

[50515] Complexin 1 (CPLX1, Accession NP_006642.1) is another GAM7080 target gene, herein designated TARGET GENE. CPLX1 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by CPLX1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CPLX1 BINDING SITE, designated SEQ ID:2150, to the

nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50516] Another function of GAM7080 is therefore inhibition of Complexin 1 (CPLX1, Accession NP_006642.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CPLX1.

[50517] Deiodinase, iodothyronine, type i (DIO1, Accession NP_000783.2) is another GAM7080 target gene, herein designated TARGET GENE. DIO1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DIO1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DIO1 BINDING SITE, designated SEQ ID:977, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50518] Another function of GAM7080 is therefore inhibition of Deiodinase, iodothyronine, type i (DIO1, Accession NP_000783.2) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DIO1.

[50519] Deiodinase, iodothyronine, type ii (DIO2, Accession

NP_054644.1) is another GAM7080 target gene, herein designated TARGET GENE. DIO2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by DIO2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DIO2 BINDING SITE, designated SEQ ID:16860, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50520] Another function of GAM7080 is therefore inhibition of Deiodinase, iodothyronine, type ii (DIO2, Accession NP_054644.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DIO2.

[50521] Deiodinase, iodothyronine, type ii (DIO2, Accession NP_000784.2) is another GAM7080 target gene, herein designated TARGET GENE. DIO2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by DIO2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DIO2

BINDING SITE, designated SEQ ID:16860, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50522] Another function of GAM7080 is therefore inhibition of Deiodinase, iodothyronine, type ii (DIO2, Accession NP_000784.2) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DIO2.

[50523] Disrupted in schizophrenia 1 (DISC1, Accession NP_061132.1) is another GAM7080 target gene, herein designated TARGET GENE. DISC1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DISC1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DISC1 BINDING SITE, designated SEQ ID:9394, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50524] Another function of GAM7080 is therefore inhibition of Disrupted in schizophrenia 1 (DISC1, Accession NP_061132.1), a gene which has globular N- terminal domain(s) and a helical C- terminal domain. and therefore

may be associated with Schizophrenia . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of Schizophrenia ., and of other diseases and clinical conditions associated with DISC1.

[50525] The function of DISC1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM116.1.DKFZP434C212 (Accession XP_044196.3) is another GAM7080 target gene, herein designated TARGET GENE. DKFZP434C212 BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by DKFZP434C212, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP434C212 BINDING SITE, designated SEQ ID:8194, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50526] Another function of GAM7080 is therefore inhibition of DKFZP434C212 (Accession XP_044196.3) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZP434C212.

[50527] DKFZP434F122 (Accession NP_056458.1) is another GAM7080 target gene, herein designated TARGET GENE. DKFZP434F122 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZP434F122, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP434F122 BINDING SITE, designated SEQ ID:8462, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50528] Another function of GAM7080 is therefore inhibition of DKFZP434F122 (Accession NP_056458.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZP434F122.

[50529] DKFZp566D234 (Accession NP_064501.1) is another GAM7080 target gene, herein designated TARGET GENE. DKFZp566D234 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZp566D234, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the

nucleotide sequences of DKFZp566D234 BINDING SITE, designated SEQ ID:18331, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50530] Another function of GAM7080 is therefore inhibition of DKFZp566D234 (Accession NP_064501.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp566D234.

[50531] DKFZp761A078 (Accession XP_089143.5) is another GAM7080 target gene, herein designated TARGET GENE. DKFZp761A078 BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by DKFZp761A078, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp761A078 BINDING SITE, designated SEQ ID:11577, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50532] Another function of GAM7080 is therefore inhibition of DKFZp761A078 (Accession XP_089143.5) . Accordingly, utilities of GAM7080 include diagnosis, prevention and

treatment of diseases and clinical conditions associated with DKFZp761A078.

[50533] DKFZp761H0421 (Accession NP_775102.1) is another GAM7080 target gene, herein designated TARGET GENE. DKFZp761H0421 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZp761H0421, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp761H0421 BINDING SITE, designated SEQ ID:4006, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50534] Another function of GAM7080 is therefore inhibition of DKFZp761H0421 (Accession NP_775102.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp761H0421.

[50535] Dentin matrix acidic phosphoprotein (DMP1, Accession NP_004398.1) is another GAM7080 target gene, herein designated TARGET GENE. DMP1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DMP1, corresponding to a target binding site

such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DMP1 BINDING SITE, designated SEQ ID:895, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50536] Another function of GAM7080 is therefore inhibition of Dentin matrix acidic phosphoprotein (DMP1, Accession NP_004398.1), a gene which regulates mineralization of bone and dentin. Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DMP1.

[50537] The function of DMP1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM100.1.Dna (cytosine-5-)-methyltransferase 3 alpha (DNMT3A, Accession NP_715640.1) is another GAM7080 target gene, herein designated TARGET GENE. DNMT3A BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by DNMT3A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DNMT3A BIND-

ING SITE, designated SEQ ID:6530, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50538] Another function of GAM7080 is therefore inhibition of Dna (cytosine-5-)-methyltransferase 3 alpha (DNMT3A, Accession NP_715640.1), a gene which intervenes in de novo methylation of DNA. Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DNMT3A.

[50539] The function of DNMT3A and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM47.1.Dihydropyrimidinase (DPYS, Accession NP_001376.1) is another GAM7080 target gene, herein designated TARGET GENE. DPYS BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DPYS, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DPYS BINDING SITE, designated SEQ ID:2493, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50540] Another function of GAM7080 is therefore inhibition of Dihydropyrimidinase (DPYS, Accession NP_001376.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DPYS.

[50541] Ets homologous factor (EHF, Accession NP_758433.1) is another GAM7080 target gene, herein designated TARGET GENE. EHF BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by EHF, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of EHF BINDING SITE, designated SEQ ID:8009, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50542] Another function of GAM7080 is therefore inhibition of Ets homologous factor (EHF, Accession NP_758433.1), a gene which is Member of the ESE subfamily of Ets transcription factors. Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with EHF.

[50543] The function of EHF and its association with various dis-

eases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM47.1. Ets homologous factor (EHF, Accession NP_036285.2) is another GAM7080 target gene, herein designated TARGET GENE. EHF BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by EHF, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of EHF BINDING SITE, designated SEQ ID:8009, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50544] Another function of GAM7080 is therefore inhibition of Ets homologous factor (EHF, Accession NP_036285.2), a gene which is Member of the ESE subfamily of Ets transcription factors. Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with EHF.

[50545] The function of EHF and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM47.1. ELYS (Accession NP_056261.1) is another

GAM7080 target gene, herein designated TARGET GENE. ELYS BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by ELYS, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ELYS BINDING SITE, designated SEQ ID:16818, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50546] Another function of GAM7080 is therefore inhibition of ELYS (Accession NP_056261.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ELYS.

[50547] ENTH (Accession NP_055481.1) is another GAM7080 target gene, herein designated TARGET GENE. ENTH BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ENTH, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ENTH BINDING SITE, designated SEQ ID:9793, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50548] Another function of GAM7080 is therefore inhibition of ENTH (Accession NP_055481.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ENTH.

[50549] Epha3 (EPA3, Accession NP_005224.2) is another GAM7080 target gene, herein designated TARGET GENE. EPA3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by EPA3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of EPA3 BINDING SITE, designated SEQ ID:2129, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50550] Another function of GAM7080 is therefore inhibition of Epha3 (EPA3, Accession NP_005224.2), a gene which binds to ephrin- a2, - a3, - a4 and - a5. could play a role in lymphoid function. Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with EPA3.

[50551] The function of EPA3 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM653.1.ErbB2 interacting protein (ERBB2IP, Accession NP_061165.1) is another GAM7080 target gene, herein designated TARGET GENE. ERBB2IP BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ERBB2IP, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ERBB2IP BINDING SITE, designated SEQ ID:13817, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50552] Another function of GAM7080 is therefore inhibition of ErbB2 interacting protein (ERBB2IP, Accession NP_061165.1), a gene which ERBB2 interacting protein; acts as an adaptor for the receptor ERBB2/HER2. Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ERBB2IP.

[50553] The function of ERBB2IP and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM388.1.FLJ10945 (Accession NP_060750.1) is another GAM7080 target gene, herein designated TARGET

GENE. FLJ10945 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ10945, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ10945 BINDING SITE, designated SEQ ID:11146, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50554] Another function of GAM7080 is therefore inhibition of FLJ10945 (Accession NP_060750.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ10945.

[50555] FLJ11016 (Accession NP_060771.1) is another GAM7080 target gene, herein designated TARGET GENE. FLJ11016 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FLJ11016, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ11016 BINDING SITE, designated SEQ ID:424, to the nucleotide sequence of GAM7080 RNA, herein designated

GAM RNA, also designated SEQ ID:399.

[50556] Another function of GAM7080 is therefore inhibition of FLJ11016 (Accession NP_060771.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ11016.

[50557] FLJ11088 (Accession NP_060788.1) is another GAM7080 target gene, herein designated TARGET GENE. FLJ11088 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FLJ11088, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ11088 BINDING SITE, designated SEQ ID:4825, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50558] Another function of GAM7080 is therefore inhibition of FLJ11088 (Accession NP_060788.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ11088.

[50559] FLJ12770 (Accession NP_115550.2) is another GAM7080 target gene, herein designated TARGET GENE. FLJ12770

BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ12770, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ12770 BINDING SITE, designated SEQ ID:10912, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50560] Another function of GAM7080 is therefore inhibition of FLJ12770 (Accession NP_115550.2) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ12770.

[50561] FLJ14166 (Accession NP_078841.1) is another GAM7080 target gene, herein designated TARGET GENE. FLJ14166 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ14166, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ14166 BINDING SITE, designated SEQ ID:17295, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50562] Another function of GAM7080 is therefore inhibition of FLJ14166 (Accession NP_078841.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ14166.

[50563] FLJ20748 (Accession NP_061893.1) is another GAM7080 target gene, herein designated TARGET GENE. FLJ20748 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ20748, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20748 BINDING SITE, designated SEQ ID:7141, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50564] Another function of GAM7080 is therefore inhibition of FLJ20748 (Accession NP_061893.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20748.

[50565] FLJ21596 (Accession NP_079099.1) is another GAM7080 target gene, herein designated TARGET GENE. FLJ21596 BINDING SITE is a target binding site found in the 3' un-

translated region of mRNA encoded by FLJ21596, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ21596 BINDING SITE, designated SEQ ID:8448, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50566] Another function of GAM7080 is therefore inhibition of FLJ21596 (Accession NP_079099.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ21596.

[50567] FLJ21742 (Accession NP_115583.1) is another GAM7080 target gene, herein designated TARGET GENE. FLJ21742 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ21742, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ21742 BINDING SITE, designated SEQ ID:8081, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50568] Another function of GAM7080 is therefore inhibition of

FLJ21742 (Accession NP_115583.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ21742.

[50569] FLJ23056 (Accession NP_078858.1) is another GAM7080 target gene, herein designated TARGET GENE. FLJ23056 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ23056, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ23056 BINDING SITE, designated SEQ ID:1870, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50570] Another function of GAM7080 is therefore inhibition of FLJ23056 (Accession NP_078858.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ23056.

[50571] FLJ32549 (Accession NP_689653.1) is another GAM7080 target gene, herein designated TARGET GENE. FLJ32549 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ32549, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ32549 BINDING SITE, designated SEQ ID:4634, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50572] Another function of GAM7080 is therefore inhibition of FLJ32549 (Accession NP_689653.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ32549.

[50573] FLJ32926 (Accession NP_653178.1) is another GAM7080 target gene, herein designated TARGET GENE. FLJ32926 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ32926, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ32926 BINDING SITE, designated SEQ ID:9432, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50574] Another function of GAM7080 is therefore inhibition of FLJ32926 (Accession NP_653178.1) . Accordingly, utilities

of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ32926.

[50575] FLJ36331 (Accession XP_211925.1) is another GAM7080 target gene, herein designated TARGET GENE. FLJ36331 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ36331, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ36331 BINDING SITE, designated SEQ ID:18131, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50576] Another function of GAM7080 is therefore inhibition of FLJ36331 (Accession XP_211925.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ36331.

[50577] FLJ38773 (Accession NP_848623.1) is another GAM7080 target gene, herein designated TARGET GENE. FLJ38773 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FLJ38773, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ38773 BINDING SITE, designated SEQ ID:6074, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50578] Another function of GAM7080 is therefore inhibition of FLJ38773 (Accession NP_848623.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ38773.

[50579] Frequently rearranged in advanced t-cell lymphomas 2 (FRAT2, Accession NP_036215.1) is another GAM7080 target gene, herein designated TARGET GENE. FRAT2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FRAT2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FRAT2 BINDING SITE, designated SEQ ID:9254, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50580] Another function of GAM7080 is therefore inhibition of Frequently rearranged in advanced t-cell lymphomas 2

(FRAT2, Accession NP_036215.1), a gene which binds gsk- 3 and prevents gsk- 3- dependent phosphorylation. and therefore may be associated with Cancer. Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of Cancer., and of other diseases and clinical conditions associated with FRAT2.

[50581] The function of FRAT2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM1044.1.Gdnf family receptor alpha 1 (GFRA1, Accession NP_665736.1) is another GAM7080 target gene, herein designated TARGET GENE. GFRA1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by GFRA1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GFRA1 BINDING SITE, designated SEQ ID:2463, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50582] Another function of GAM7080 is therefore inhibition of Gdnf family receptor alpha 1 (GFRA1, Accession NP_665736.1), a gene which mediates the gdnf- induced

autophosphorylation and activation of the ret receptor (by similarity). and therefore may be associated with Hirschsprung disease. Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of Hirschsprung disease., and of other diseases and clinical conditions associated with GFRA1.

[50583] The function of GFRA1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM64.1.Gdnf family receptor alpha 1 (GFRA1, Accession NP_005255.1) is another GAM7080 target gene, herein designated TARGET GENE. GFRA1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by GFRA1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GFRA1 BINDING SITE, designated SEQ ID:2463, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50584] Another function of GAM7080 is therefore inhibition of Gdnf family receptor alpha 1 (GFRA1, Accession NP_005255.1), a gene which mediates the gdnf- induced

autophosphorylation and activation of the ret receptor (by similarity). and therefore may be associated with Hirschsprung disease. Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of Hirschsprung disease., and of other diseases and clinical conditions associated with GFRA1.

[50585] The function of GFRA1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM64.1. Guanine nucleotide binding protein (g protein), q polypeptide (GNAQ, Accession NP_002063.1) is another GAM7080 target gene, herein designated TARGET GENE. GNAQ BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GNAQ, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GNAQ BINDING SITE, designated SEQ ID:11690, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50586] Another function of GAM7080 is therefore inhibition of Guanine nucleotide binding protein (g protein), q polypeptide (GNAQ, Accession NP_002063.1), a gene

which transduces signals from G protein- coupled receptors and mediates activation of phospholipase C beta. Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GNAQ.

[50587] The function of GNAQ and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM522.1.G protein pathway suppressor 2 (GPS2, Accession NP_116329.1) is another GAM7080 target gene, herein designated TARGET GENE. GPS2 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by GPS2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GPS2 BINDING SITE, designated SEQ ID:5146, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50588] Another function of GAM7080 is therefore inhibition of G protein pathway suppressor 2 (GPS2, Accession NP_116329.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical

cal conditions associated with GPS2.

[50589] G protein pathway suppressor 2 (GPS2, Accession NP_004480.1) is another GAM7080 target gene, herein designated TARGET GENE. GPS2 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by GPS2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GPS2 BINDING SITE, designated SEQ ID:5146, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50590] Another function of GAM7080 is therefore inhibition of G protein pathway suppressor 2 (GPS2, Accession NP_004480.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GPS2.

[50591] Glutamate receptor, metabotropic 4 (GRM4, Accession NP_000832.1) is another GAM7080 target gene, herein designated TARGET GENE. GRM4 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GRM4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III

of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GRM4 BINDING SITE, designated SEQ ID:9216, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50592] Another function of GAM7080 is therefore inhibition of Glutamate receptor, metabotropic 4 (GRM4, Accession NP_000832.1), a gene which is mediated by a g- protein that inhibits adenylate cyclase activity. Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GRM4.

[50593] The function of GRM4 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM223.1. Gastrin-releasing peptide receptor (GRPR, Accession NP_005305.1) is another GAM7080 target gene, herein designated TARGET GENE. GRPR BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by GRPR, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GRPR BINDING SITE,

designated SEQ ID:12903, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50594] Another function of GAM7080 is therefore inhibition of Gastrin-releasing peptide receptor (GRPR, Accession NP_005305.1), a gene which mediates its action by association with g proteins that activate a phosphatidylinositol- calcium second messenger system. Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GRPR.

[50595] The function of GRPR and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM106.1.Glutathione s-transferase m3 (brain) (GSTM3, Accession NP_000840.2) is another GAM7080 target gene, herein designated TARGET GENE. GSTM3 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by GSTM3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GSTM3 BINDING SITE, designated SEQ ID:10695, to the

nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50596] Another function of GAM7080 is therefore inhibition of Glutathione s-transferase m3 (brain) (GSTM3, Accession NP_000840.2), a gene which conjugates reduced glutathione to a wide number of exogenous and endogenous hydrophobic electrophiles. Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GSTM3.

[50597] The function of GSTM3 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM442.1.H2AV (Accession NP_619541.1) is another GAM7080 target gene, herein designated TARGET GENE. H2AV BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by H2AV, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of H2AV BINDING SITE, designated SEQ ID:9227, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50598] Another function of GAM7080 is therefore inhibition of H2AV (Accession NP_619541.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with H2AV.

[50599] Histone deacetylase 9 (HDAC9, Accession NP_055522.1) is another GAM7080 target gene, herein designated TARGET GENE. HDAC9 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by HDAC9, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HDAC9 BINDING SITE, designated SEQ ID:2779, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50600] Another function of GAM7080 is therefore inhibition of Histone deacetylase 9 (HDAC9, Accession NP_055522.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HDAC9.

[50601] Hect domain and rld 3 (HERC3, Accession NP_055421.1) is another GAM7080 target gene, herein designated TARGET GENE. HERC3 BINDING SITE is a target binding site found

in the 3' untranslated region of mRNA encoded by HERC3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HERC3 BINDING SITE, designated SEQ ID:4462, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50602] Another function of GAM7080 is therefore inhibition of Hect domain and rld 3 (HERC3, Accession NP_055421.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HERC3.

[50603] High-mobility group 20a (HMG20A, Accession NP_060670.1) is another GAM7080 target gene, herein designated TARGET GENE. HMG20A BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by HMG20A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HMG20A BINDING SITE, designated SEQ ID:15708, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA,

also designated SEQ ID:399.

[50604] Another function of GAM7080 is therefore inhibition of High-mobility group 20a (HMG20A, Accession NP_060670.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HMG20A.

[50605] HSPC052 (Accession NP_054869.1) is another GAM7080 target gene, herein designated TARGET GENE. HSPC052 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HSPC052, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HSPC052 BINDING SITE, designated SEQ ID:19338, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50606] Another function of GAM7080 is therefore inhibition of HSPC052 (Accession NP_054869.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HSPC052.

[50607] HSPC132 (Accession NP_057483.1) is another GAM7080 target gene, herein designated TARGET GENE. HSPC132

BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HSPC132, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HSPC132 BINDING SITE, designated SEQ ID:9884, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50608] Another function of GAM7080 is therefore inhibition of HSPC132 (Accession NP_057483.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HSPC132.

[50609] 5-hydroxytryptamine (serotonin) receptor 2c (HTR2C, Accession NP_000859.1) is another GAM7080 target gene, herein designated TARGET GENE. HTR2C BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HTR2C, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HTR2C BINDING SITE, designated SEQ ID:17294, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA,

also designated SEQ ID:399.

[50610] Another function of GAM7080 is therefore inhibition of 5-hydroxytryptamine (serotonin) receptor 2c (HTR2C, Accession NP_000859.1), a gene which activates phospholipase C and regulates intracellular calcium flux. Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HTR2C.

[50611] The function of HTR2C and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM536.1. Islet cell autoantigen 1, 69kda (ICA1, Accession NP_071683.1) is another GAM7080 target gene, herein designated TARGET GENE. ICA1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by ICA1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ICA1 BINDING SITE, designated SEQ ID:8564, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50612] Another function of GAM7080 is therefore inhibition of

Islet cell autoantigen 1, 69kda (ICA1, Accession NP_071683.1), a gene which encodes Islet cell autoantigen 1 and therefore may be associated with Insulin-dependent diabetes mellitus. Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of Insulin-dependent diabetes mellitus, and of other diseases and clinical conditions associated with ICA1.

[50613] The function of ICA1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM94.1. Islet cell autoantigen 1, 69kda (ICA1, Accession NP_004959.1) is another GAM7080 target gene, herein designated TARGET GENE. ICA1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by ICA1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ICA1 BINDING SITE, designated SEQ ID:8564, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50614] Another function of GAM7080 is therefore inhibition of Islet cell autoantigen 1, 69kda (ICA1, Accession

NP_004959.1), a gene which encodes Islet cell autoantigen 1 and therefore may be associated with Insulin-dependent diabetes mellitus. Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of Insulin-dependent diabetes mellitus, and of other diseases and clinical conditions associated with ICA1.

[50615] The function of ICA1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM94.1. Interleukin 24 (IL24, Accession NP_006841.1) is another GAM7080 target gene, herein designated TARGET GENE. IL24 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by IL24, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IL24 BINDING SITE, designated SEQ ID:6880, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50616] Another function of GAM7080 is therefore inhibition of Interleukin 24 (IL24, Accession NP_006841.1), a gene which may contribute to terminal cell differentiation. Ac-

cordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with IL24.

[50617] The function of IL24 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM426.2. Interleukin 6 signal transducer (gp130, oncostatin m receptor) (IL6ST, Accession NP_786943.1) is another GAM7080 target gene, herein designated TARGET GENE. IL6ST BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by IL6ST, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IL6ST BINDING SITE, designated SEQ ID:18250, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50618] Another function of GAM7080 is therefore inhibition of Interleukin 6 signal transducer (gp130, oncostatin m receptor) (IL6ST, Accession NP_786943.1), a gene which is the interleukin- 6 signal transducer. and therefore may be associated with Compensatory cardiac hypertrophy and

heart failure. Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of Compensatory cardiac hypertrophy and heart failure, and of other diseases and clinical conditions associated with IL6ST.

[50619] The function of IL6ST and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM365.1. Interleukin 6 signal transducer (gp130, oncostatin m receptor) (IL6ST, Accession NP_002175.2) is another GAM7080 target gene, herein designated TARGET GENE. IL6ST BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by IL6ST, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IL6ST BINDING SITE, designated SEQ ID:18250, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50620] Another function of GAM7080 is therefore inhibition of Interleukin 6 signal transducer (gp130, oncostatin m receptor) (IL6ST, Accession NP_002175.2), a gene which is the interleukin- 6 signal transducer. and therefore may be

associated with Compensatory cardiac hypertrophy and heart failure. Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of Compensatory cardiac hypertrophy and heart failure, and of other diseases and clinical conditions associated with IL6ST.

[50621] The function of IL6ST and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM365.1. ITR (Accession NP_851320.1) is another GAM7080 target gene, herein designated TARGET GENE. ITR BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ITR, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ITR BINDING SITE, designated SEQ ID:19486, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50622] Another function of GAM7080 is therefore inhibition of ITR (Accession NP_851320.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ITR.

[50623] Potassium voltage-gated channel, kqt-like subfamily,

member 2 (KCNQ2, Accession NP_004509.2) is another GAM7080 target gene, herein designated TARGET GENE. KCNQ2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by KCNQ2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KCNQ2 BINDING SITE, designated SEQ ID:18822, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50624] Another function of GAM7080 is therefore inhibition of Potassium voltage-gated channel, kqt-like subfamily, member 2 (KCNQ2, Accession NP_004509.2), a gene which is probably important in the regulation of neuronal excitability. and therefore is associated with Epilepsy, benign neonatal, 1. Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of Epilepsy, benign neonatal, 1, and of other diseases and clinical conditions associated with KCNQ2.

[50625] The function of KCNQ2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM47.1.Potassium voltage-gated channel, kqt-like subfamily, member 2 (KCNQ2, Accession NP_004509.2) is another GAM7080 target gene, herein designated TARGET GENE. KCNQ2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by KCNQ2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KCNQ2 BINDING SITE, designated SEQ ID:18822, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50626] Another function of GAM7080 is therefore inhibition of Potassium voltage-gated channel, kqt-like subfamily, member 2 (KCNQ2, Accession NP_004509.2), a gene which is probably important in the regulation of neuronal excitability. and therefore is associated with Epilepsy, benign neonatal, 1. Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of Epilepsy, benign neonatal, 1, and of other diseases and clinical conditions associated with KCNQ2.

[50627] The function of KCNQ2 and its association with various diseases and clinical conditions, has been established by

previous studies, as described hereinabove with reference to GAM47.1.KIAA0194 (Accession XP_038362.3) is another GAM7080 target gene, herein designated TARGET GENE. KIAA0194 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0194, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0194 BINDING SITE, designated SEQ ID:11451, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50628] Another function of GAM7080 is therefore inhibition of KIAA0194 (Accession XP_038362.3) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0194.

[50629] KIAA0295 (Accession XP_042833.2) is another GAM7080 target gene, herein designated TARGET GENE. KIAA0295 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0295, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of KIAA0295 BINDING SITE, designated SEQ ID:7477, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50630] Another function of GAM7080 is therefore inhibition of KIAA0295 (Accession XP_042833.2) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0295.

[50631] KIAA0298 (Accession XP_084529.6) is another GAM7080 target gene, herein designated TARGET GENE. KIAA0298 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0298, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0298 BINDING SITE, designated SEQ ID:17364, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50632] Another function of GAM7080 is therefore inhibition of KIAA0298 (Accession XP_084529.6) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

KIAA0298.

[50633] KIAA0648 (Accession NP_056015.1) is another GAM7080 target gene, herein designated TARGET GENE. KIAA0648 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0648, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0648 BINDING SITE, designated SEQ ID:616, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50634] Another function of GAM7080 is therefore inhibition of KIAA0648 (Accession NP_056015.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0648.

[50635] KIAA0711 (Accession NP_055682.1) is another GAM7080 target gene, herein designated TARGET GENE. KIAA0711 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0711, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

KIAA0711 BINDING SITE, designated SEQ ID:10952, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50636] Another function of GAM7080 is therefore inhibition of KIAA0711 (Accession NP_055682.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0711.

[50637] KIAA0960 (Accession XP_166543.3) is another GAM7080 target gene, herein designated TARGET GENE. KIAA0960 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0960, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0960 BINDING SITE, designated SEQ ID:3532, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50638] Another function of GAM7080 is therefore inhibition of KIAA0960 (Accession XP_166543.3) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0960.

[50639] KIAA1036 (Accession NP_055724.1) is another GAM7080 target gene, herein designated TARGET GENE. KIAA1036 BINDING SITE1 and KIAA1036 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by KIAA1036, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1036 BINDING SITE1 and KIAA1036 BINDING SITE2, designated SEQ ID:10200 and SEQ ID:1597 respectively, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50640] Another function of GAM7080 is therefore inhibition of KIAA1036 (Accession NP_055724.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1036.

[50641] KIAA1046 (Accession NP_055743.1) is another GAM7080 target gene, herein designated TARGET GENE. KIAA1046 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1046, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of KIAA1046 BINDING SITE, designated SEQ ID:2608, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50642] Another function of GAM7080 is therefore inhibition of KIAA1046 (Accession NP_055743.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1046.

[50643] KIAA1069 (Accession XP_042635.3) is another GAM7080 target gene, herein designated TARGET GENE. KIAA1069 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1069, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1069 BINDING SITE, designated SEQ ID:3207, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50644] Another function of GAM7080 is therefore inhibition of KIAA1069 (Accession XP_042635.3) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

KIAA1069.

[50645] KIAA1117 (Accession NP_055833.1) is another GAM7080 target gene, herein designated TARGET GENE. KIAA1117 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by KIAA1117, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1117 BINDING SITE, designated SEQ ID:3218, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50646] Another function of GAM7080 is therefore inhibition of KIAA1117 (Accession NP_055833.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1117.

[50647] KIAA1450 (Accession XP_038035.4) is another GAM7080 target gene, herein designated TARGET GENE. KIAA1450 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1450, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

KIAA1450 BINDING SITE, designated SEQ ID:11038, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50648] Another function of GAM7080 is therefore inhibition of KIAA1450 (Accession XP_038035.4) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1450.

[50649] KIAA1917 (Accession XP_290732.1) is another GAM7080 target gene, herein designated TARGET GENE. KIAA1917 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1917, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1917 BINDING SITE, designated SEQ ID:459, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50650] Another function of GAM7080 is therefore inhibition of KIAA1917 (Accession XP_290732.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1917.

[50651] KIAA2020 (Accession XP_290463.1) is another GAM7080 target gene, herein designated TARGET GENE. KIAA2020 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by KIAA2020, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA2020 BINDING SITE, designated SEQ ID:15054, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50652] Another function of GAM7080 is therefore inhibition of KIAA2020 (Accession XP_290463.1). Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA2020.

[50653] LOC115129 (Accession XP_055292.1) is another GAM7080 target gene, herein designated TARGET GENE. LOC115129 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC115129, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC115129 BINDING SITE, design-

nated SEQ ID:15815, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50654] Another function of GAM7080 is therefore inhibition of LOC115129 (Accession XP_055292.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC115129.

[50655] LOC124895 (Accession XP_058863.4) is another GAM7080 target gene, herein designated TARGET GENE. LOC124895 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC124895, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC124895 BINDING SITE, designated SEQ ID:8762, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50656] Another function of GAM7080 is therefore inhibition of LOC124895 (Accession XP_058863.4) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC124895.

[50657] LOC144319 (Accession XP_096576.1) is another GAM7080 target gene, herein designated TARGET GENE. LOC144319 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC144319, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC144319 BINDING SITE, designated SEQ ID:15953, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50658] Another function of GAM7080 is therefore inhibition of LOC144319 (Accession XP_096576.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC144319.

[50659] LOC146713 (Accession XP_097071.2) is another GAM7080 target gene, herein designated TARGET GENE. LOC146713 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC146713, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC146713 BINDING SITE, designated SEQ ID:965, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50660] Another function of GAM7080 is therefore inhibition of LOC146713 (Accession XP_097071.2) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC146713.

[50661] LOC147229 (Accession XP_085742.1) is another GAM7080 target gene, herein designated TARGET GENE. LOC147229 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC147229, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC147229 BINDING SITE, designated SEQ ID:18084, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50662] Another function of GAM7080 is therefore inhibition of LOC147229 (Accession XP_085742.1) . Accordingly, utili-

ties of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC147229.

[50663] LOC149672 (Accession XP_086669.2) is another GAM7080 target gene, herein designated TARGET GENE. LOC149672 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC149672, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC149672 BINDING SITE, designated SEQ ID:7399, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50664] Another function of GAM7080 is therefore inhibition of LOC149672 (Accession XP_086669.2) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC149672.

[50665] LOC150051 (Accession XP_097792.1) is another GAM7080 target gene, herein designated TARGET GENE. LOC150051 BINDING SITE1 and LOC150051 BINDING SITE2 are target binding sites found in untranslated re-

gions of mRNA encoded by LOC150051, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC150051 BINDING SITE1 and LOC150051 BINDING SITE2, designated SEQ ID:9570 and SEQ ID:499 respectively, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50666] Another function of GAM7080 is therefore inhibition of LOC150051 (Accession XP_097792.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC150051.

[50667] LOC157556 (Accession XP_098783.1) is another GAM7080 target gene, herein designated TARGET GENE. LOC157556 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC157556, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC157556 BINDING SITE, designated SEQ ID:4249, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also design-

nated SEQ ID:399.

[50668] Another function of GAM7080 is therefore inhibition of LOC157556 (Accession XP_098783.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC157556.

[50669] LOC157737 (Accession XP_098819.1) is another GAM7080 target gene, herein designated TARGET GENE. LOC157737 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC157737, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC157737 BINDING SITE, designated SEQ ID:17175, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50670] Another function of GAM7080 is therefore inhibition of LOC157737 (Accession XP_098819.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC157737.

[50671] LOC160897 (Accession XP_090573.3) is another

GAM7080 target gene, herein designated TARGET GENE. LOC160897 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC160897, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC160897 BINDING SITE, designated SEQ ID:19486, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50672] Another function of GAM7080 is therefore inhibition of LOC160897 (Accession XP_090573.3) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC160897.

[50673] LOC164633 (Accession XP_092894.3) is another GAM7080 target gene, herein designated TARGET GENE. LOC164633 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC164633, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC164633 BINDING SITE, design-

nated SEQ ID:3527, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50674] Another function of GAM7080 is therefore inhibition of LOC164633 (Accession XP_092894.3) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC164633.

[50675] LOC199858 (Accession XP_114040.1) is another GAM7080 target gene, herein designated TARGET GENE. LOC199858 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC199858, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC199858 BINDING SITE, designated SEQ ID:1893, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50676] Another function of GAM7080 is therefore inhibition of LOC199858 (Accession XP_114040.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC199858.

[50677] LOC199920 (Accession XP_114056.3) is another GAM7080 target gene, herein designated TARGET GENE. LOC199920 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC199920, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC199920 BINDING SITE, designated SEQ ID:4186, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50678] Another function of GAM7080 is therefore inhibition of LOC199920 (Accession XP_114056.3) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC199920.

[50679] LOC200230 (Accession XP_114166.1) is another GAM7080 target gene, herein designated TARGET GENE. LOC200230 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC200230, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC200230 BINDING SITE, designated SEQ ID:8763, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50680] Another function of GAM7080 is therefore inhibition of LOC200230 (Accession XP_114166.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC200230.

[50681] LOC254826 (Accession XP_173188.1) is another GAM7080 target gene, herein designated TARGET GENE. LOC254826 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC254826, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC254826 BINDING SITE, designated SEQ ID:8776, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50682] Another function of GAM7080 is therefore inhibition of LOC254826 (Accession XP_173188.1) . Accordingly, utili-

ties of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC254826.

[50683] LOC255458 (Accession XP_173150.1) is another GAM7080 target gene, herein designated TARGET GENE. LOC255458 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC255458, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC255458 BINDING SITE, designated SEQ ID:6761, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50684] Another function of GAM7080 is therefore inhibition of LOC255458 (Accession XP_173150.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC255458.

[50685] LOC256401 (Accession XP_171149.1) is another GAM7080 target gene, herein designated TARGET GENE. LOC256401 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by

LOC256401, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC256401 BINDING SITE, designated SEQ ID:14202, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50686] Another function of GAM7080 is therefore inhibition of LOC256401 (Accession XP_171149.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC256401.

[50687] LOC283035 (Accession XP_208488.1) is another GAM7080 target gene, herein designated TARGET GENE. LOC283035 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283035, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283035 BINDING SITE, designated SEQ ID:17378, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50688] Another function of GAM7080 is therefore inhibition of LOC283035 (Accession XP_208488.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283035.

[50689] LOC283196 (Accession XP_210930.1) is another GAM7080 target gene, herein designated TARGET GENE. LOC283196 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC283196, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283196 BINDING SITE, designated SEQ ID:5966, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50690] Another function of GAM7080 is therefore inhibition of LOC283196 (Accession XP_210930.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283196.

[50691] LOC283352 (Accession XP_210989.1) is another GAM7080 target gene, herein designated TARGET GENE.

LOC283352 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283352, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283352 BINDING SITE, designated SEQ ID:10759, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50692] Another function of GAM7080 is therefore inhibition of LOC283352 (Accession XP_210989.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283352.

[50693] LOC283392 (Accession XP_211010.1) is another GAM7080 target gene, herein designated TARGET GENE. LOC283392 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283392, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283392 BINDING SITE, designated SEQ ID:8184, to the nucleotide sequence of

GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50694] Another function of GAM7080 is therefore inhibition of LOC283392 (Accession XP_211010.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283392.

[50695] LOC283475 (Accession XP_211056.1) is another GAM7080 target gene, herein designated TARGET GENE. LOC283475 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283475, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283475 BINDING SITE, designated SEQ ID:11008, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50696] Another function of GAM7080 is therefore inhibition of LOC283475 (Accession XP_211056.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283475.

[50697] LOC283487 (Accession XP_211062.1) is another GAM7080 target gene, herein designated TARGET GENE. LOC283487 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by LOC283487, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283487 BINDING SITE, designated SEQ ID:9217, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50698] Another function of GAM7080 is therefore inhibition of LOC283487 (Accession XP_211062.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283487.

[50699] LOC283551 (Accession XP_211110.1) is another GAM7080 target gene, herein designated TARGET GENE. LOC283551 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283551, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC283551 BINDING SITE, designated SEQ ID:10098, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50700] Another function of GAM7080 is therefore inhibition of LOC283551 (Accession XP_211110.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283551.

[50701] LOC283678 (Accession XP_211159.2) is another GAM7080 target gene, herein designated TARGET GENE. LOC283678 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283678, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283678 BINDING SITE, designated SEQ ID:15253, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50702] Another function of GAM7080 is therefore inhibition of LOC283678 (Accession XP_211159.2) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC283678.

[50703] LOC284155 (Accession XP_211354.1) is another GAM7080 target gene, herein designated TARGET GENE. LOC284155 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284155, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284155 BINDING SITE, designated SEQ ID:19691, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50704] Another function of GAM7080 is therefore inhibition of LOC284155 (Accession XP_211354.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284155.

[50705] LOC284456 (Accession XP_211470.1) is another GAM7080 target gene, herein designated TARGET GENE. LOC284456 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284456, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284456 BINDING SITE, designated SEQ ID:6823, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50706] Another function of GAM7080 is therefore inhibition of LOC284456 (Accession XP_211470.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284456.

[50707] LOC284613 (Accession XP_209289.1) is another GAM7080 target gene, herein designated TARGET GENE. LOC284613 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284613, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284613 BINDING SITE, designated SEQ ID:984, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50708] Another function of GAM7080 is therefore inhibition of

LOC284613 (Accession XP_209289.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284613.

[50709] LOC284697 (Accession XP_209326.1) is another GAM7080 target gene, herein designated TARGET GENE. LOC284697 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC284697, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284697 BINDING SITE, designated SEQ ID:3202, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50710] Another function of GAM7080 is therefore inhibition of LOC284697 (Accession XP_209326.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284697.

[50711] LOC284808 (Accession XP_209372.1) is another GAM7080 target gene, herein designated TARGET GENE. LOC284808 BINDING SITE is a target binding site found in

the 5' untranslated region of mRNA encoded by LOC284808, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284808 BINDING SITE, designated SEQ ID:6074, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50712] Another function of GAM7080 is therefore inhibition of LOC284808 (Accession XP_209372.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284808.

[50713] LOC284836 (Accession XP_211654.1) is another GAM7080 target gene, herein designated TARGET GENE. LOC284836 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC284836, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284836 BINDING SITE, designated SEQ ID:7599, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also design-

nated SEQ ID:399.

[50714] Another function of GAM7080 is therefore inhibition of LOC284836 (Accession XP_211654.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284836.

[50715] LOC285035 (Accession XP_209446.1) is another GAM7080 target gene, herein designated TARGET GENE. LOC285035 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC285035, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285035 BINDING SITE, designated SEQ ID:3915, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50716] Another function of GAM7080 is therefore inhibition of LOC285035 (Accession XP_209446.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285035.

[50717] LOC285262 (Accession XP_208309.1) is another

GAM7080 target gene, herein designated TARGET GENE. LOC285262 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285262, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285262 BINDING SITE, designated SEQ ID:7389, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50718] Another function of GAM7080 is therefore inhibition of LOC285262 (Accession XP_208309.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285262.

[50719] LOC285533 (Accession NP_775933.1) is another GAM7080 target gene, herein designated TARGET GENE. LOC285533 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285533, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285533 BINDING SITE, design-

nated SEQ ID:1910, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50720] Another function of GAM7080 is therefore inhibition of LOC285533 (Accession NP_775933.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285533.

[50721] LOC285616 (Accession XP_211951.1) is another GAM7080 target gene, herein designated TARGET GENE. LOC285616 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285616, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285616 BINDING SITE, designated SEQ ID:15058, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50722] Another function of GAM7080 is therefore inhibition of LOC285616 (Accession XP_211951.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC285616.

[50723] LOC285678 (Accession XP_209717.1) is another GAM7080 target gene, herein designated TARGET GENE. LOC285678 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC285678, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285678 BINDING SITE, designated SEQ ID:16233, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50724] Another function of GAM7080 is therefore inhibition of LOC285678 (Accession XP_209717.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285678.

[50725] LOC285831 (Accession XP_212625.1) is another GAM7080 target gene, herein designated TARGET GENE. LOC285831 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by LOC285831, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or

BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285831 BINDING SITE, designated SEQ ID:10911, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50726] Another function of GAM7080 is therefore inhibition of LOC285831 (Accession XP_212625.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285831.

[50727] LOC285831 (Accession XP_212577.1) is another GAM7080 target gene, herein designated TARGET GENE. LOC285831 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by LOC285831, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285831 BINDING SITE, designated SEQ ID:10911, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50728] Another function of GAM7080 is therefore inhibition of LOC285831 (Accession XP_212577.1) . Accordingly, utili-

ties of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285831.

[50729] LOC285831 (Accession XP_209784.1) is another GAM7080 target gene, herein designated TARGET GENE. LOC285831 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by LOC285831, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285831 BINDING SITE, designated SEQ ID:10911, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50730] Another function of GAM7080 is therefore inhibition of LOC285831 (Accession XP_209784.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285831.

[50731] LOC285954 (Accession XP_212085.1) is another GAM7080 target gene, herein designated TARGET GENE. LOC285954 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by

LOC285954, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285954 BINDING SITE, designated SEQ ID:20134, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50732] Another function of GAM7080 is therefore inhibition of LOC285954 (Accession XP_212085.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285954.

[50733] LOC285958 (Accession XP_212099.1) is another GAM7080 target gene, herein designated TARGET GENE. LOC285958 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC285958, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285958 BINDING SITE, designated SEQ ID:12641, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50734] Another function of GAM7080 is therefore inhibition of LOC285958 (Accession XP_212099.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285958.

[50735] LOC286090 (Accession XP_212166.3) is another GAM7080 target gene, herein designated TARGET GENE. LOC286090 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC286090, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286090 BINDING SITE, designated SEQ ID:2162, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50736] Another function of GAM7080 is therefore inhibition of LOC286090 (Accession XP_212166.3) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286090.

[50737] LOC286404 (Accession XP_210036.1) is another GAM7080 target gene, herein designated TARGET GENE.

LOC286404 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by LOC286404, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286404 BINDING SITE, designated SEQ ID:4159, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50738] Another function of GAM7080 is therefore inhibition of LOC286404 (Accession XP_210036.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286404.

[50739] LOC286430 (Accession XP_210044.1) is another GAM7080 target gene, herein designated TARGET GENE. LOC286430 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC286430, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286430 BINDING SITE, designated SEQ ID:7177, to the nucleotide sequence of

GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50740] Another function of GAM7080 is therefore inhibition of LOC286430 (Accession XP_210044.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286430.

[50741] LOC286448 (Accession XP_212322.1) is another GAM7080 target gene, herein designated TARGET GENE. LOC286448 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286448, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286448 BINDING SITE, designated SEQ ID:1246, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50742] Another function of GAM7080 is therefore inhibition of LOC286448 (Accession XP_212322.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286448.

[50743] LOC338841 (Accession XP_290597.1) is another GAM7080 target gene, herein designated TARGET GENE. LOC338841 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC338841, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338841 BINDING SITE, designated SEQ ID:19377, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50744] Another function of GAM7080 is therefore inhibition of LOC338841 (Accession XP_290597.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC338841.

[50745] LOC338852 (Accession XP_294733.1) is another GAM7080 target gene, herein designated TARGET GENE. LOC338852 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC338852, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC338852 BINDING SITE, designated SEQ ID:526, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50746] Another function of GAM7080 is therefore inhibition of LOC338852 (Accession XP_294733.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC338852.

[50747] LOC339543 (Accession XP_294623.1) is another GAM7080 target gene, herein designated TARGET GENE. LOC339543 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339543, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339543 BINDING SITE, designated SEQ ID:6991, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50748] Another function of GAM7080 is therefore inhibition of LOC339543 (Accession XP_294623.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC339543.

[50749] LOC339896 (Accession XP_291059.1) is another GAM7080 target gene, herein designated TARGET GENE. LOC339896 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339896, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339896 BINDING SITE, designated SEQ ID:15682, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50750] Another function of GAM7080 is therefore inhibition of LOC339896 (Accession XP_291059.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339896.

[50751] LOC339907 (Accession XP_291065.1) is another GAM7080 target gene, herein designated TARGET GENE. LOC339907 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339907, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339907 BINDING SITE, designated SEQ ID:10378, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50752] Another function of GAM7080 is therefore inhibition of LOC339907 (Accession XP_291065.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339907.

[50753] LOC339975 (Accession XP_295115.1) is another GAM7080 target gene, herein designated TARGET GENE. LOC339975 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC339975, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339975 BINDING SITE, designated SEQ ID:1546, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50754] Another function of GAM7080 is therefore inhibition of

LOC339975 (Accession XP_295115.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339975.

[50755] LOC340238 (Accession XP_295188.1) is another GAM7080 target gene, herein designated TARGET GENE. LOC340238 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC340238, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340238 BINDING SITE, designated SEQ ID:11781, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50756] Another function of GAM7080 is therefore inhibition of LOC340238 (Accession XP_295188.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340238.

[50757] LOC340241 (Accession XP_295191.1) is another GAM7080 target gene, herein designated TARGET GENE. LOC340241 BINDING SITE is a target binding site found in

the 5' untranslated region of mRNA encoded by LOC340241, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340241 BINDING SITE, designated SEQ ID:11781, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50758] Another function of GAM7080 is therefore inhibition of LOC340241 (Accession XP_295191.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340241.

[50759] LOC340493 (Accession XP_291312.1) is another GAM7080 target gene, herein designated TARGET GENE. LOC340493 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC340493, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340493 BINDING SITE, designated SEQ ID:14512, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also design-

nated SEQ ID:399.

[50760] Another function of GAM7080 is therefore inhibition of LOC340493 (Accession XP_291312.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340493.

[50761] LOC347804 (Accession XP_166630.4) is another GAM7080 target gene, herein designated TARGET GENE. LOC347804 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC347804, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC347804 BINDING SITE, designated SEQ ID:15054, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50762] Another function of GAM7080 is therefore inhibition of LOC347804 (Accession XP_166630.4) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC347804.

[50763] LOC348155 (Accession XP_211219.1) is another

GAM7080 target gene, herein designated TARGET GENE. LOC348155 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC348155, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348155 BINDING SITE, designated SEQ ID:17092, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50764] Another function of GAM7080 is therefore inhibition of LOC348155 (Accession XP_211219.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348155.

[50765] LOC348378 (Accession XP_300723.1) is another GAM7080 target gene, herein designated TARGET GENE. LOC348378 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC348378, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348378 BINDING SITE, design-

nated SEQ ID:16073, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50766] Another function of GAM7080 is therefore inhibition of LOC348378 (Accession XP_300723.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348378.

[50767] LOC348461 (Accession XP_302764.1) is another GAM7080 target gene, herein designated TARGET GENE. LOC348461 BINDING SITE1 and LOC348461 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC348461, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348461 BINDING SITE1 and LOC348461 BINDING SITE2, designated SEQ ID:13532 and SEQ ID:10426 respectively, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50768] Another function of GAM7080 is therefore inhibition of LOC348461 (Accession XP_302764.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC348461.

[50769] LOC352051 (Accession XP_305365.1) is another GAM7080 target gene, herein designated TARGET GENE. LOC352051 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC352051, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC352051 BINDING SITE, designated SEQ ID:16506, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50770] Another function of GAM7080 is therefore inhibition of LOC352051 (Accession XP_305365.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC352051.

[50771] LOC90786 (Accession XP_034127.1) is another GAM7080 target gene, herein designated TARGET GENE. LOC90786 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC90786, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC90786 BINDING SITE, designated SEQ ID:6662, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50772] Another function of GAM7080 is therefore inhibition of LOC90786 (Accession XP_034127.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC90786.

[50773] LOC90906 (Accession XP_034809.1) is another GAM7080 target gene, herein designated TARGET GENE. LOC90906 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC90906, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC90906 BINDING SITE, designated SEQ ID:8870, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50774] Another function of GAM7080 is therefore inhibition of LOC90906 (Accession XP_034809.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC90906.

[50775] LOC91948 (Accession XP_041723.1) is another GAM7080 target gene, herein designated TARGET GENE. LOC91948 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC91948, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC91948 BINDING SITE, designated SEQ ID:9979, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50776] Another function of GAM7080 is therefore inhibition of LOC91948 (Accession XP_041723.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC91948.

[50777] Mitogen-activated protein kinase kinase kinase 12 (MAP3K12, Accession NP_006292.2) is another GAM7080 target gene, herein designated TARGET GENE. MAP3K12 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MAP3K12, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MAP3K12 BINDING SITE, designated SEQ ID:6350, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50778] Another function of GAM7080 is therefore inhibition of Mitogen-activated protein kinase kinase kinase 12 (MAP3K12, Accession NP_006292.2) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MAP3K12.

[50779] MAPKBP1 (Accession XP_031706.7) is another GAM7080 target gene, herein designated TARGET GENE. MAPKBP1 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MAPKBP1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MAPKBP1 BINDING SITE, designated SEQ ID:6124, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50780] Another function of GAM7080 is therefore inhibition of MAPKBP1 (Accession XP_031706.7) . Accordingly, utilities

of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MAP-KBP1.

[50781] MGC26484 (Accession NP_689840.1) is another GAM7080 target gene, herein designated TARGET GENE. MGC26484 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC26484, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC26484 BINDING SITE, designated SEQ ID:14202, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50782] Another function of GAM7080 is therefore inhibition of MGC26484 (Accession NP_689840.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC26484.

[50783] MGC5391 (Accession NP_116129.2) is another GAM7080 target gene, herein designated TARGET GENE. MGC5391 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC5391, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC5391 BINDING SITE, designated SEQ ID:11363, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50784] Another function of GAM7080 is therefore inhibition of MGC5391 (Accession NP_116129.2) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC5391.

[50785] Microsomal glutathione s-transferase 1 (MGST1, Accession NP_064696.1) is another GAM7080 target gene, herein designated TARGET GENE. MGST1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by MGST1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGST1 BINDING SITE, designated SEQ ID:18899, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50786] Another function of GAM7080 is therefore inhibition of Microsomal glutathione s-transferase 1 (MGST1, Acces-

sion NP_064696.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGST1.

[50787] Microsomal glutathione s-transferase 1 (MGST1, Accession NP_665707.1) is another GAM7080 target gene, herein designated TARGET GENE. MGST1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by MGST1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGST1 BINDING SITE, designated SEQ ID:18899, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50788] Another function of GAM7080 is therefore inhibition of Microsomal glutathione s-transferase 1 (MGST1, Accession NP_665707.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGST1.

[50789] Microsomal glutathione s-transferase 1 (MGST1, Accession NP_665734.1) is another GAM7080 target gene, herein designated TARGET GENE. MGST1 BINDING SITE is a target binding site found in the 3' untranslated region of

multiple transcripts of mRNA encoded by MGST1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGST1 BINDING SITE, designated SEQ ID:18899, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50790] Another function of GAM7080 is therefore inhibition of Microsomal glutathione s-transferase 1 (MGST1, Accession NP_665734.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGST1.

[50791] Microsomal glutathione s-transferase 1 (MGST1, Accession NP_665735.1) is another GAM7080 target gene, herein designated TARGET GENE. MGST1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by MGST1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGST1 BINDING SITE, designated SEQ ID:18899, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50792] Another function of GAM7080 is therefore inhibition of Microsomal glutathione s-transferase 1 (MGST1, Accession NP_665735.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGST1.

[50793] Makorin, ring finger protein, 1 (MKRN1, Accession NP_038474.1) is another GAM7080 target gene, herein designated TARGET GENE. MKRN1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MKRN1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MKRN1 BINDING SITE, designated SEQ ID:5996, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50794] Another function of GAM7080 is therefore inhibition of Makorin, ring finger protein, 1 (MKRN1, Accession NP_038474.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MKRN1.

[50795] MMAB (Accession NP_443077.1) is another GAM7080 target gene, herein designated TARGET GENE. MMAB BIND-

ING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MMAB, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MMAB BINDING SITE, designated SEQ ID:4890, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50796] Another function of GAM7080 is therefore inhibition of MMAB (Accession NP_443077.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MMAB.

[50797] Molybdenum cofactor synthesis 2 (MOCS2, Accession NP_004522.1) is another GAM7080 target gene, herein designated TARGET GENE. MOCS2 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by MOCS2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MOCS2 BINDING SITE, designated SEQ ID:18450, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50798] Another function of GAM7080 is therefore inhibition of Molybdenum cofactor synthesis 2 (MOCS2, Accession NP_004522.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MOCS2.

[50799] Nijmegen breakage syndrome 1 (nibrin) (NBS1, Accession NP_002476.1) is another GAM7080 target gene, herein designated TARGET GENE. NBS1 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by NBS1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NBS1 BINDING SITE, designated SEQ ID:9084, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50800] Another function of GAM7080 is therefore inhibition of Nijmegen breakage syndrome 1 (nibrin) (NBS1, Accession NP_002476.1), a gene which may be involved in repair of DNA double- strand breaks and therefore may be associated with Nijmegen breakage syndrome . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of Nijmegen breakage syndrome ., and of other

diseases and clinical conditions associated with NBS1.

[50801] The function of NBS1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM861.2. Neural precursor cell expressed, developmentally down-regulated 5 (NEDD5, Accession NP_004395.1) is another GAM7080 target gene, herein designated TARGET GENE. NEDD5 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by NEDD5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NEDD5 BINDING SITE, designated SEQ ID:5197, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50802] Another function of GAM7080 is therefore inhibition of Neural precursor cell expressed, developmentally down-regulated 5 (NEDD5, Accession NP_004395.1). Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NEDD5.

[50803] Nei like 2 (e. coli) (NEIL2, Accession NP_659480.1) is an-

other GAM7080 target gene, herein designated TARGET GENE. NEIL2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by NEIL2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NEIL2 BINDING SITE, designated SEQ ID:18237, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50804] Another function of GAM7080 is therefore inhibition of Nei like 2 (e. coli) (NEIL2, Accession NP_659480.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NEIL2.

[50805] 8-oxoguanine dna glycosylase (OGG1, Accession NP_058438.1) is another GAM7080 target gene, herein designated TARGET GENE. OGG1 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by OGG1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of OGG1 BINDING SITE, designated SEQ ID:9506, to the nucleotide

sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50806] Another function of GAM7080 is therefore inhibition of 8-oxoguanine dna glycosylase (OGG1, Accession NP_058438.1), a gene which is involved in base excision DNA repair and removal of 8- oxyguanine and therefore may be associated with Tumorigenesis. Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of Tumorigenesis, and of other diseases and clinical conditions associated with OGG1.

[50807] The function of OGG1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM63.1.8-oxoguanine dna glycosylase (OGG1, Accession NP_058214.1) is another GAM7080 target gene, herein designated TARGET GENE. OGG1 BINDING SITE is a target binding site found in the 5` untranslated region of multiple transcripts of mRNA encoded by OGG1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of OGG1 BINDING SITE, designated SEQ ID:9506, to the nucleotide sequence of GAM7080 RNA, herein designated

GAM RNA, also designated SEQ ID:399.

[50808] Another function of GAM7080 is therefore inhibition of 8-oxoguanine dna glycosylase (OGG1, Accession NP_058214.1), a gene which is involved in base excision DNA repair and removal of 8- oxyguanine and therefore may be associated with Tumorigenesis. Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of Tumorigenesis, and of other diseases and clinical conditions associated with OGG1.

[50809] The function of OGG1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM63.1.8-oxoguanine dna glycosylase (OGG1, Accession NP_058434.1) is another GAM7080 target gene, herein designated TARGET GENE. OGG1 BINDING SITE is a target binding site found in the 5` untranslated region of multiple transcripts of mRNA encoded by OGG1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of OGG1 BINDING SITE, designated SEQ ID:9506, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50810] Another function of GAM7080 is therefore inhibition of 8-oxoguanine dna glycosylase (OGG1, Accession NP_058434.1), a gene which is involved in base excision DNA repair and removal of 8- oxyguanine and therefore may be associated with Tumorigenesis. Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of Tumorigenesis, and of other diseases and clinical conditions associated with OGG1.

[50811] The function of OGG1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM63.1.8-oxoguanine dna glycosylase (OGG1, Accession NP_058213.1) is another GAM7080 target gene, herein designated TARGET GENE. OGG1 BINDING SITE is a target binding site found in the 5` untranslated region of multiple transcripts of mRNA encoded by OGG1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of OGG1 BINDING SITE, designated SEQ ID:9506, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50812] Another function of GAM7080 is therefore inhibition of

8-oxoguanine dna glycosylase (OGG1, Accession NP_058213.1), a gene which is involved in base excision DNA repair and removal of 8- oxyguanine and therefore may be associated with Tumorigenesis. Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of Tumorigenesis, and of other diseases and clinical conditions associated with OGG1.

[50813] The function of OGG1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM63.1.8-oxoguanine dna glycosylase (OGG1, Accession NP_058436.1) is another GAM7080 target gene, herein designated TARGET GENE. OGG1 BINDING SITE is a target binding site found in the 5` untranslated region of multiple transcripts of mRNA encoded by OGG1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of OGG1 BINDING SITE, designated SEQ ID:9506, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50814] Another function of GAM7080 is therefore inhibition of 8-oxoguanine dna glycosylase (OGG1, Accession

NP_058436.1), a gene which is involved in base excision DNA repair and removal of 8-oxoguanine and therefore may be associated with Tumorigenesis. Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of Tumorigenesis, and of other diseases and clinical conditions associated with OGG1.

[50815] The function of OGG1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM63.1.8-oxoguanine dna glycosylase (OGG1, Accession NP_058437.1) is another GAM7080 target gene, herein designated TARGET GENE. OGG1 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by OGG1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of OGG1 BINDING SITE, designated SEQ ID:9506, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50816] Another function of GAM7080 is therefore inhibition of 8-oxoguanine dna glycosylase (OGG1, Accession NP_058437.1), a gene which is involved in base excision

DNA repair and removal of 8- oxyguanine and therefore may be associated with Tumorigenesis. Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of Tumorigenesis, and of other diseases and clinical conditions associated with OGG1.

[50817] The function of OGG1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM63.1.8-oxoguanine dna glycosylase (OGG1, Accession NP_002533.1) is another GAM7080 target gene, herein designated TARGET GENE. OGG1 BINDING SITE is a target binding site found in the 5` untranslated region of multiple transcripts of mRNA encoded by OGG1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of OGG1 BINDING SITE, designated SEQ ID:9506, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50818] Another function of GAM7080 is therefore inhibition of 8-oxoguanine dna glycosylase (OGG1, Accession NP_002533.1), a gene which is involved in base excision DNA repair and removal of 8- oxyguanine and therefore

may be associated with Tumorigenesis. Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of Tumorigenesis, and of other diseases and clinical conditions associated with OGG1.

[50819] The function of OGG1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM63.1.8-oxoguanine dna glycosylase (OGG1, Accession NP_058212.1) is another GAM7080 target gene, herein designated TARGET GENE. OGG1 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by OGG1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of OGG1 BINDING SITE, designated SEQ ID:9506, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50820] Another function of GAM7080 is therefore inhibition of 8-oxoguanine dna glycosylase (OGG1, Accession NP_058212.1), a gene which is involved in base excision DNA repair and removal of 8- oxyguanine and therefore may be associated with Tumorigenesis. Accordingly, utili-

ties of GAM7080 include diagnosis, prevention and treatment of Tumorigenesis, and of other diseases and clinical conditions associated with OGG1.

[50821] The function of OGG1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM63.1.Oligodendrocyte lineage transcription factor 2 (OLIG2, Accession NP_005797.1) is another GAM7080 target gene, herein designated TARGET GENE. OLIG2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by OLIG2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of OLIG2 BINDING SITE, designated SEQ ID:1833, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50822] Another function of GAM7080 is therefore inhibition of Oligodendrocyte lineage transcription factor 2 (OLIG2, Accession NP_005797.1), a gene which may bind DNA and contains a helix-loop-helix DNA-binding domain. Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions as-

sociated with OLIG2.

[50823] The function of OLIG2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM163.1.PCSCL (Accession XP_027668.7) is another GAM7080 target gene, herein designated TARGET GENE. PCSCL BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PCSCL, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PCSCL BINDING SITE, designated SEQ ID:13407, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50824] Another function of GAM7080 is therefore inhibition of PCSCL (Accession XP_027668.7) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PCSCL.

[50825] Paternally expressed 10 (PEG10, Accession NP_055883.1) is another GAM7080 target gene, herein designated TARGET GENE. PEG10 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PEG10, corresponding to a target binding site such as

BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PEG10 BINDING SITE, designated SEQ ID:7017, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50826] Another function of GAM7080 is therefore inhibition of Paternally expressed 10 (PEG10, Accession NP_055883.1). Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PEG10.

[50827] Phosphatidylinositol-4-phosphate 5-kinase, type i, gamma (PIP5K1C, Accession XP_047620.2) is another GAM7080 target gene, herein designated TARGET GENE. PIP5K1C BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PIP5K1C, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PIP5K1C BINDING SITE, designated SEQ ID:5961, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50828] Another function of GAM7080 is therefore inhibition of Phosphatidylinositol-4-phosphate 5-kinase, type i, gamma (PIP5K1C, Accession XP_047620.2) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PIP5K1C.

[50829] Phosphatidylinositol-4-phosphate 5-kinase, type i, gamma (PIP5K1C, Accession NP_036530.1) is another GAM7080 target gene, herein designated TARGET GENE. PIP5K1C BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PIP5K1C, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PIP5K1C BINDING SITE, designated SEQ ID:5961, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50830] Another function of GAM7080 is therefore inhibition of Phosphatidylinositol-4-phosphate 5-kinase, type i, gamma (PIP5K1C, Accession NP_036530.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated

with PIP5K1C.

[50831] PLEKHE1 (Accession XP_166290.1) is another GAM7080 target gene, herein designated TARGET GENE. PLEKHE1 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by PLEKHE1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PLEKHE1 BINDING SITE, designated SEQ ID:996, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50832] Another function of GAM7080 is therefore inhibition of PLEKHE1 (Accession XP_166290.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PLEKHE1.

[50833] Protein phosphatase, ef hand calcium-binding domain 1 (PPEF1, Accession NP_689411.1) is another GAM7080 target gene, herein designated TARGET GENE. PPEF1 BINDING SITE1 and PPEF1 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by PPEF1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING

SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PPEF1 BINDING SITE1 and PPEF1 BINDING SITE2, designated SEQ ID:10928 and SEQ ID:3646 respectively, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50834] Another function of GAM7080 is therefore inhibition of Protein phosphatase, ef hand calcium-binding domain 1 (PPEF1, Accession NP_689411.1), a gene which may have a role in the recovery or adaptation response of photoreceptors and therefore may be associated with X-linked juvenile retinoschisis. Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of X-linked juvenile retinoschisis, and of other diseases and clinical conditions associated with PPEF1.

[50835] The function of PPEF1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM65.2. Protein phosphatase 1a (formerly 2c), magnesium-dependent, alpha isoform (PPM1A, Accession NP_808820.1) is another GAM7080 target gene, herein designated TARGET GENE. PPM1A BINDING SITE is a target binding site found in the 5' untranslated region of multi-

ple transcripts of mRNA encoded by PPM1A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PPM1A BINDING SITE, designated SEQ ID:11868, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50836] Another function of GAM7080 is therefore inhibition of Protein phosphatase 1a (formerly 2c), magnesium-dependent, alpha isoform (PPM1A, Accession NP_808820.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PPM1A.

[50837] Protein phosphatase 1, regulatory (inhibitor) subunit 9a (PPP1R9A, Accession NP_060120.1) is another GAM7080 target gene, herein designated TARGET GENE. PPP1R9A BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PPP1R9A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PPP1R9A BINDING SITE, designated SEQ ID:3742, to the nucleotide sequence of GAM7080 RNA, herein designated

GAM RNA, also designated SEQ ID:399.

[50838] Another function of GAM7080 is therefore inhibition of Protein phosphatase 1, regulatory (inhibitor) subunit 9a (PPP1R9A, Accession NP_060120.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PPP1R9A.

[50839] ProSAPiP2 (Accession NP_055541.1) is another GAM7080 target gene, herein designated TARGET GENE. ProSAPiP2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ProSAPiP2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ProSAPiP2 BINDING SITE, designated SEQ ID:12114, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50840] Another function of GAM7080 is therefore inhibition of ProSAPiP2 (Accession NP_055541.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ProSAPiP2.

[50841] Rab35, member ras oncogene family (RAB35, Accession

NP_006852.1) is another GAM7080 target gene, herein designated TARGET GENE. RAB35 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RAB35, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RAB35 BINDING SITE, designated SEQ ID:18480, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50842] Another function of GAM7080 is therefore inhibition of Rab35, member ras oncogene family (RAB35, Accession NP_006852.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RAB35.

[50843] Rab6a, member ras oncogene family (RAB6A, Accession NP_002860.2) is another GAM7080 target gene, herein designated TARGET GENE. RAB6A BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by RAB6A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RAB6A BINDING SITE, designated

SEQ ID:6689, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50844] Another function of GAM7080 is therefore inhibition of Rab6a, member ras oncogene family (RAB6A, Accession NP_002860.2), a gene which is involved in protein trafficking. Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RAB6A.

[50845] The function of RAB6A and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM374.2.REC8 (Accession NP_005123.1) is another GAM7080 target gene, herein designated TARGET GENE. REC8 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by REC8, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of REC8 BINDING SITE, designated SEQ ID:18238, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50846] Another function of GAM7080 is therefore inhibition of

REC8 (Accession NP_005123.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with REC8.

[50847] SCN3B (Accession NP_060870.1) is another GAM7080 target gene, herein designated TARGET GENE. SCN3B BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SCN3B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SCN3B BINDING SITE, designated SEQ ID:15263, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50848] Another function of GAM7080 is therefore inhibition of SCN3B (Accession NP_060870.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SCN3B.

[50849] SF4 (Accession NP_066987.1) is another GAM7080 target gene, herein designated TARGET GENE. SF4 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SF4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the comple-

mentarity of the nucleotide sequences of SF4 BINDING SITE, designated SEQ ID:5616, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50850] Another function of GAM7080 is therefore inhibition of SF4 (Accession NP_066987.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SF4.

[50851] SHAPY (Accession NP_620148.1) is another GAM7080 target gene, herein designated TARGET GENE. SHAPY BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by SHAPY, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SHAPY BINDING SITE, designated SEQ ID:7951, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50852] Another function of GAM7080 is therefore inhibition of SHAPY (Accession NP_620148.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SHAPY.

[50853] Solute carrier family 26, member 9 (SLC26A9, Accession

NP_443166.1) is another GAM7080 target gene, herein designated TARGET GENE. SLC26A9 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by SLC26A9, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC26A9 BINDING SITE, designated SEQ ID:10994, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50854] Another function of GAM7080 is therefore inhibition of Solute carrier family 26, member 9 (SLC26A9, Accession NP_443166.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SLC26A9.

[50855] Solute carrier family 26, member 9 (SLC26A9, Accession NP_599152.1) is another GAM7080 target gene, herein designated TARGET GENE. SLC26A9 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by SLC26A9, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

SLC26A9 BINDING SITE, designated SEQ ID:10994, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50856] Another function of GAM7080 is therefore inhibition of Solute carrier family 26, member 9 (SLC26A9, Accession NP_599152.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SLC26A9.

[50857] Syntaphilin (SNPH, Accession NP_055538.1) is another GAM7080 target gene, herein designated TARGET GENE. SNPH BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SNPH, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SNPH BINDING SITE, designated SEQ ID:6584, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50858] Another function of GAM7080 is therefore inhibition of Syntaphilin (SNPH, Accession NP_055538.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SNPH.

[50859] Sulfotransferase family 4a, member 1 (SULT4A1, Accession NP_795343.1) is another GAM7080 target gene, herein designated TARGET GENE. SULT4A1 BINDING SITE1 and SULT4A1 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by SULT4A1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SULT4A1 BINDING SITE1 and SULT4A1 BINDING SITE2, designated SEQ ID:1964 and SEQ ID:1964 respectively, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50860] Another function of GAM7080 is therefore inhibition of Sulfotransferase family 4a, member 1 (SULT4A1, Accession NP_795343.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SULT4A1.

[50861] Sulfotransferase family 4a, member 1 (SULT4A1, Accession NP_795343.1) is another GAM7080 target gene, herein designated TARGET GENE. SULT4A1 BINDING SITE1 and SULT4A1 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of

mRNA encoded by SULT4A1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SULT4A1 BINDING SITE1 and SULT4A1 BINDING SITE2, designated SEQ ID:19791 and SEQ ID:443 respectively, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50862] Another function of GAM7080 is therefore inhibition of Sulfotransferase family 4a, member 1 (SULT4A1, Accession NP_795343.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SULT4A1.

[50863] Tbc1 domain family, member 5 (TBC1D5, Accession NP_055559.1) is another GAM7080 target gene, herein designated TARGET GENE. TBC1D5 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TBC1D5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TBC1D5 BINDING SITE, designated SEQ ID:7853, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also des-

ignated SEQ ID:399.

[50864] Another function of GAM7080 is therefore inhibition of Tbc1 domain family, member 5 (TBC1D5, Accession NP_055559.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TBC1D5.

[50865] Tubulin-specific chaperone d (TBCD, Accession NP_005984.2) is another GAM7080 target gene, herein designated TARGET GENE. TBCD BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by TBCD, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TBCD BINDING SITE, designated SEQ ID:687, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50866] Another function of GAM7080 is therefore inhibition of Tubulin-specific chaperone d (TBCD, Accession NP_005984.2), a gene which modulates microtubule dynamics by capturing GTP- bound TUBB. Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TBCD.

[50867] The function of TBCD and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM2205.1. Transducin (beta)-like 1x-linked (TBL1X, Accession NP_005638.1) is another GAM7080 target gene, herein designated TARGET GENE. TBL1X BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TBL1X, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TBL1X BINDING SITE, designated SEQ ID:13310, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50868] Another function of GAM7080 is therefore inhibition of Transducin (beta)-like 1x-linked (TBL1X, Accession NP_005638.1), a gene which activates latent HDAC3 activity. Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TBL1X.

[50869] The function of TBL1X and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM28.1. Transcription factor 3 (e2a immunoglobulin enhancer binding factors e12/e47) (TCF3, Accession NP_003191.1) is another GAM7080 target gene, herein designated TARGET GENE. TCF3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TCF3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TCF3 BINDING SITE, designated SEQ ID:19748, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50870] Another function of GAM7080 is therefore inhibition of Transcription factor 3 (e2a immunoglobulin enhancer binding factors e12/e47) (TCF3, Accession NP_003191.1), a gene which plays major roles in determining tissue-specific cell fate during embryogenesis. Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TCF3.

[50871] The function of TCF3 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM460.1.Tgfb-induced factor (tale family homeobox) (TGIF, Accession NP_733796.2) is another GAM7080 target gene, herein designated TARGET GENE. TGIF BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by TGIF, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TGIF BINDING SITE, designated SEQ ID:14220, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50872] Another function of GAM7080 is therefore inhibition of Tgfb-induced factor (tale family homeobox) (TGIF, Accession NP_733796.2) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TGIF.

[50873] Th1-like (drosophila) (TH1L, Accession NP_057481.1) is another GAM7080 target gene, herein designated TARGET GENE. TH1L BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TH1L, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide se-

quences of TH1L BINDING SITE, designated SEQ ID:11801, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50874] Another function of GAM7080 is therefore inhibition of Th1-like (drosophila) (TH1L, Accession NP_057481.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TH1L.

[50875] Toll-like receptor 4 (TLR4, Accession NP_612567.1) is another GAM7080 target gene, herein designated TARGET GENE. TLR4 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by TLR4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TLR4 BINDING SITE, designated SEQ ID:14153, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50876] Another function of GAM7080 is therefore inhibition of Toll-like receptor 4 (TLR4, Accession NP_612567.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions as-

sociated with TLR4.

[50877] Tumor necrosis factor (ligand) superfamily, member 15 (TNFSF15, Accession NP_005109.2) is another GAM7080 target gene, herein designated TARGET GENE. TNFSF15 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TNFSF15, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TNFSF15 BINDING SITE, designated SEQ ID:1718, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50878] Another function of GAM7080 is therefore inhibition of Tumor necrosis factor (ligand) superfamily, member 15 (TNFSF15, Accession NP_005109.2), a gene which acts as an autocrine factor to induce apoptosis in endothelial cells. Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TNFSF15.

[50879] The function of TNFSF15 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM100.1.Torsin family 1, member b (torsin b)

(TOR1B, Accession NP_055321.1) is another GAM7080 target gene, herein designated TARGET GENE. TOR1B BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TOR1B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TOR1B BINDING SITE, designated SEQ ID:15595, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50880] Another function of GAM7080 is therefore inhibition of Torsin family 1, member b (torsin b) (TOR1B, Accession NP_055321.1). Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TOR1B.

[50881] Tropomyosin 3 (TPM3, Accession NP_705935.1) is another GAM7080 target gene, herein designated TARGET GENE. TPM3 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by TPM3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TPM3 BINDING SITE, designated

SEQ ID:5328, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50882] Another function of GAM7080 is therefore inhibition of Tropomyosin 3 (TPM3, Accession NP_705935.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TPM3.

[50883] TREM5 (Accession NP_777552.1) is another GAM7080 target gene, herein designated TARGET GENE. TREM5 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TREM5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TREM5 BINDING SITE, designated SEQ ID:10274, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50884] Another function of GAM7080 is therefore inhibition of TREM5 (Accession NP_777552.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TREM5.

[50885] TRIM41 (Accession NP_291027.2) is another GAM7080

target gene, herein designated TARGET GENE. TRIM41 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TRIM41, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TRIM41 BINDING SITE, designated SEQ ID:12798, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50886] Another function of GAM7080 is therefore inhibition of TRIM41 (Accession NP_291027.2) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TRIM41.

[50887] Thioredoxin reductase 1 (TXNRD1, Accession NP_003321.1) is another GAM7080 target gene, herein designated TARGET GENE. TXNRD1 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by TXNRD1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TXNRD1 BINDING SITE, designated SEQ ID:10465, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA,

also designated SEQ ID:399.

[50888] Another function of GAM7080 is therefore inhibition of Thioredoxin reductase 1 (TXNRD1, Accession NP_003321.1), a gene which acts as an antioxidant enzyme and is involved in maintaining redox balance. Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TXNRD1.

[50889] The function of TXNRD1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM425.1. Ubiquitin-like 1 (sentrin) (UBL1, Accession NP_003343.1) is another GAM7080 target gene, herein designated TARGET GENE. UBL1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by UBL1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of UBL1 BINDING SITE, designated SEQ ID:4385, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50890] Another function of GAM7080 is therefore inhibition of

Ubiquitin-like 1 (sentrin) (UBL1, Accession NP_003343.1), a gene which generates proteins resistant to degradation through its modification. Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with UBL1.

[50891] The function of UBL1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM500.2. Unc-51-like kinase 1 (c. elegans) (ULK1, Accession NP_003556.1) is another GAM7080 target gene, herein designated TARGET GENE. ULK1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ULK1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ULK1 BINDING SITE, designated SEQ ID:19009, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50892] Another function of GAM7080 is therefore inhibition of Unc-51-like kinase 1 (c. elegans) (ULK1, Accession NP_003556.1). Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical

cal conditions associated with ULK1.

[50893] WIT-1 (Accession NP_056939.1) is another GAM7080 target gene, herein designated TARGET GENE. WIT-1 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by WIT-1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of WIT-1 BINDING SITE, designated SEQ ID:4885, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50894] Another function of GAM7080 is therefore inhibition of WIT-1 (Accession NP_056939.1) . Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with WIT-1.

[50895] Zinc finger protein 10 (kox 1) (ZNF10, Accession NP_056209.2) is another GAM7080 target gene, herein designated TARGET GENE. ZNF10 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZNF10, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF10 BINDING SITE, designated

SEQ ID:7309, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50896] Another function of GAM7080 is therefore inhibition of Zinc finger protein 10 (kox 1) (ZNF10, Accession NP_056209.2), a gene which may function as a transcriptional regulator. Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF10.

[50897] The function of ZNF10 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM322.1. Zinc finger protein 197 (ZNF197, Accession NP_008922.1) is another GAM7080 target gene, herein designated TARGET GENE. ZNF197 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZNF197, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF197 BINDING SITE, designated SEQ ID:16525, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50898] Another function of GAM7080 is therefore inhibition of Zinc finger protein 197 (ZNF197, Accession NP_008922.1). Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF197.

[50899] Zinc finger protein 263 (ZNF263, Accession NP_005732.2) is another GAM7080 target gene, herein designated TARGET GENE. ZNF263 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZNF263, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF263 BINDING SITE, designated SEQ ID:4318, to the nucleotide sequence of GAM7080 RNA, herein designated GAM RNA, also designated SEQ ID:399.

[50900] Another function of GAM7080 is therefore inhibition of Zinc finger protein 263 (ZNF263, Accession NP_005732.2). Accordingly, utilities of GAM7080 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF263.

[50901]

[50902] Fig. 8 further provides a conceptual description of a novel

bioinformatically detected of the present invention, referred to here as Genomic Address Messenger 7553 (GAM7553), which modulates expression of respective target genes thereof, the function and utility of which target genes is known in the art.

[50903] GAM7553 is a novel bioinformatically detected regulatory, non protein coding, micro RNA (miRNA) gene. The method by which GAM7553 was detected is described hereinabove with reference to Figs. 8-15.

[50904] GAM7553 gene, herein designated GAM GENE, and GAM7553 target gene, herein designated TARGET GENE, are human genes contained in the human genome.

[50905] GAM7553 gene encodes a GAM7553 precursor RNA, herein designated GAM PRECURSOR RNA. Similar to other miRNA genes, and unlike most ordinary genes, GAM7553 precursor RNA does not encode a protein. A nucleotide sequence identical or highly similar to the nucleotide sequence of GAM7553 precursor RNA is designated SEQ ID:48, and is provided hereinbelow with reference to the sequence listing part. Nucleotide sequence SEQ ID:48 is located at position 26917454 relative to chromosome 7.

[50906] GAM7553 precursor RNA folds onto itself, forming GAM7553 folded precursor RNA, herein designated GAM

FOLDED PRECURSOR RNA, which has a two-dimensional `hairpin structure`. As is well known in the art, this `hairpin structure`, is typical of RNA encoded by miRNA genes, and is due to the fact that the nucleotide sequence of the first half of the RNA encoded by a miRNA gene is an accurate or partial inversed-reversed sequence of the nucleotide sequence of the second half thereof.

[50907] GAM7553 precursor RNA folds onto itself, forming GAM7553 folded precursor RNA, herein designated GAM FOLDED PRECURSOR RNA, which has a two-dimensional `hairpin structure`. As is well known in the art, this `hairpin structure`, is typical of RNA encoded by miRNA genes, and is due to the fact that the nucleotide sequence of the first half of the RNA encoded by a miRNA gene is an accurate or partial reverse-complementary sequence of the nucleotide sequence of the second half thereof.

[50908] Nucleotide sequence of GAM7553 precursor RNA, designated SEQ-ID: 48, and a schematic representation of a predicted secondary folding of GAM7553 folded precursor RNA are further described with reference to Table 2, hereby incorporated by reference.

[50909] An enzyme complex designated DICER COMPLEX, `dices` the GAM7553 folded precursor RNA into GAM7553 RNA,

herein designated GAM RNA, a single stranded ~22 nt long RNA segment. As is known in the art, `dicing` of a hairpin structured RNA precursor product into a short ~22nt RNA segment is catalyzed by an enzyme complex comprising an enzyme called Dicer together with other necessary proteins. A probable (GAM Prediction Accuracy Group: A) nucleotide sequence of GAM7553 RNA is designated SEQ ID:354, and is provided hereinbelow with references to the sequence listing part and Table 3, hereby incorporated by reference.

[50910] GAM7553 target gene, herein designated TARGET GENE, encodes a corresponding messenger RNA, GAM7553 target RNA, herein designated GAM TARGET RNA. GAM7553 target RNA comprises three regions, as is typical of mRNA of a protein coding gene: a 5` untranslated region, a protein coding region and a 3` untranslated region, designated 5`UTR, PROTEIN CODING and 3`UTR respectively.

[50911] GAM7553 RNA, herein designated GAM RNA, binds complementarily to one or more target binding sites located in untranslated regions of GAM7553 target RNA, herein designated GAM TARGET RNA. This complementary binding is due to the fact that the nucleotide sequence of GAM7553 RNA is an accurate or a partial inversed-reversed se-

quence of the nucleotide sequence of each of the target binding sites. As an illustration, Fig. 8 shows three such target binding sites, designated BINDING SITE I, BINDING SITE II and BINDING SITE III respectively. It is appreciated that the number of target binding sites shown in Fig. 8 is meant as an illustration only, and is not meant to be limiting. GAM7553 RNA may have a different number of target binding sites in untranslated regions of a GAM7553 target RNA. It is further appreciated that while Fig. 8 depicts target binding sites in the 3'UTR region, this is meant as an example only; these target binding sites may be located in the 3'UTR region, the 5'UTR region, or in both 3'UTR and 5'UTR regions.

[50912] The complementary binding of GAM7553 RNA, herein designated GAM RNA, to target binding sites on GAM7553 target RNA, herein designated GAM TARGET RNA, such as BINDING SITE I, BINDING SITE II and BINDING SITE III, inhibits translation of GAM7553 target RNA into GAM7553 target protein, herein designated GAM TARGET PROTEIN. GAM target protein is therefore outlined by a broken line.

[50913] It is appreciated that GAM7553 target gene, herein designated TARGET GENE, in fact represents a plurality of GAM7553 target genes. The mRNA of each one of this

plurality of GAM7553 target genes comprises one or more target binding sites, each having a nucleotide sequence which is at least partly complementary to GAM7553 RNA, herein designated GAM RNA, and which when bound by GAM7553 RNA causes inhibition of translation of respective one or more GAM7553 target proteins.

[50914] It is further appreciated by one skilled in the art that the mode of translational inhibition illustrated by Fig. 8 with specific reference to translational inhibition exerted by GAM7553 gene, herein designated GAM GENE, on one or more GAM7553 target genes, herein collectively designated TARGET GENE, is common to other known miRNA genes. As mentioned hereinabove with reference to the background section, although a specific complementary binding site has been demonstrated only for some of the known miRNA genes (primarily Lin-4 and Let-7), all other recently discovered miRNA genes are also believed by those skilled in the art to modulate expression of other genes by complementary binding, although specific complementary binding sites of these other miRNA genes have not yet been found (Ruvkun G., Perspective: Glimpses of a tiny RNA world, Science 294,779 (2001)).

[50915] It is appreciated that specific functions and accordingly

utilities of GAM7553 correlate with, and may be deduced from, the identity of the target genes which GAM7553 binds and inhibits, and the function of these target genes, as elaborated hereinbelow.

[50916]

[50917]

[50918] (Accession NP_061085.1) is a GAM7553 target gene, herein designated TARGET GENE. BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BINDING SITE, designated SEQ ID:5708, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[50919] A function of GAM7553 is therefore inhibition of (Accession NP_061085.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with .

[50920] Adenosine a3 receptor (ADORA3, Accession NP_000668.1) is another GAM7553 target gene, herein designated TAR-

GET GENE. ADORA3 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by ADORA3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ADORA3 BINDING SITE, designated SEQ ID:12859, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[50921] Another function of GAM7553 is therefore inhibition of Adenosine a3 receptor (ADORA3, Accession NP_000668.1), a gene which the activity of this receptor is mediated by g proteins which inhibits adenylyl cyclase. Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ADORA3.

[50922] The function of ADORA3 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM291.1. Adaptor-related protein complex 1, sigma 2 subunit (AP1S2, Accession NP_003907.3) is another GAM7553 target gene, herein designated TARGET GENE. AP1S2 BINDING SITE is a target binding site found in the

3' untranslated region of mRNA encoded by AP1S2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of AP1S2 BINDING SITE, designated SEQ ID:16481, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[50923] Another function of GAM7553 is therefore inhibition of Adaptor-related protein complex 1, sigma 2 subunit (AP1S2, Accession NP_003907.3) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with AP1S2.

[50924] Ankyrin repeat and socs box-containing 13 (ASB13, Accession NP_078977.2) is another GAM7553 target gene, herein designated TARGET GENE. ASB13 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ASB13, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ASB13 BINDING SITE, designated SEQ ID:2982, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[50925] Another function of GAM7553 is therefore inhibition of Ankyrin repeat and socs box-containing 13 (ASB13, Accession NP_078977.2) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ASB13.

[50926] BIG1 (Accession NP_006412.1) is another GAM7553 target gene, herein designated TARGET GENE. BIG1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by BIG1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BIG1 BINDING SITE, designated SEQ ID:13008, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[50927] Another function of GAM7553 is therefore inhibition of BIG1 (Accession NP_006412.1), a gene which is a guanine nucleotide- exchange protein, has a role in vesicular transport. Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BIG1.

[50928] The function of BIG1 and its association with various diseases and clinical conditions, has been established by

previous studies, as described hereinabove with reference to GAM47.1.BIKE (Accession NP_060063.1) is another GAM7553 target gene, herein designated TARGET GENE. BIKE BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by BIKE, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BIKE BINDING SITE, designated SEQ ID:2961, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[50929] Another function of GAM7553 is therefore inhibition of BIKE (Accession NP_060063.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BIKE.

[50930] BLAME (Accession NP_064510.1) is another GAM7553 target gene, herein designated TARGET GENE. BLAME BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by BLAME, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BLAME BINDING SITE, designated SEQ ID:19073, to the nucleotide

sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[50931] Another function of GAM7553 is therefore inhibition of BLAME (Accession NP_064510.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BLAME.

[50932] Blepharophimosis, epicanthus inversus and ptosis, candidate 1 (BPESC1, Accession NP_068584.1) is another GAM7553 target gene, herein designated TARGET GENE. BPESC1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by BPESC1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BPESC1 BINDING SITE, designated SEQ ID:5329, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[50933] Another function of GAM7553 is therefore inhibition of Blepharophimosis, epicanthus inversus and ptosis, candidate 1 (BPESC1, Accession NP_068584.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BPESC1.

[50934] C14orf65 (Accession NP_777639.1) is another GAM7553 target gene, herein designated TARGET GENE. C14orf65 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C14orf65, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C14orf65 BINDING SITE, designated SEQ ID:4755, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[50935] Another function of GAM7553 is therefore inhibition of C14orf65 (Accession NP_777639.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C14orf65.

[50936] Calneuron 1 (CALN1, Accession NP_113656.1) is another GAM7553 target gene, herein designated TARGET GENE. CALN1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CALN1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CALN1 BINDING SITE, designated SEQ ID:19469, to the

nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[50937] Another function of GAM7553 is therefore inhibition of Calneuron 1 (CALN1, Accession NP_113656.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CALN1.

[50938] Caspase 7, apoptosis-related cysteine protease (CASP7, Accession NP_203125.1) is another GAM7553 target gene, herein designated TARGET GENE. CASP7 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CASP7, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CASP7 BINDING SITE, designated SEQ ID:3279, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[50939] Another function of GAM7553 is therefore inhibition of Caspase 7, apoptosis-related cysteine protease (CASP7, Accession NP_203125.1), a gene which is an apoptosis-related caspase and involves in the activation of executing caspases. Accordingly, utilities of GAM7553 include diag-

nosis, prevention and treatment of diseases and clinical conditions associated with CASP7.

[50940] The function of CASP7 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM408.2.Caspase 7, apoptosis-related cysteine protease (CASP7, Accession NP_203124.1) is another GAM7553 target gene, herein designated TARGET GENE. CASP7 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CASP7, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CASP7 BINDING SITE, designated SEQ ID:3279, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[50941] Another function of GAM7553 is therefore inhibition of Caspase 7, apoptosis-related cysteine protease (CASP7, Accession NP_203124.1), a gene which is an apoptosis-related caspase and involves in the activation of executing caspases. Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical

conditions associated with CASP7.

[50942] The function of CASP7 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM408.2. Caspase 7, apoptosis-related cysteine protease (CASP7, Accession NP_001218.1) is another GAM7553 target gene, herein designated TARGET GENE. CASP7 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CASP7, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CASP7 BINDING SITE, designated SEQ ID:3279, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[50943] Another function of GAM7553 is therefore inhibition of Caspase 7, apoptosis-related cysteine protease (CASP7, Accession NP_001218.1), a gene which is an apoptosis-related caspase and involves in the activation of executing caspases. Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CASP7.

[50944] The function of CASP7 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM408.2. Caspase 7, apoptosis-related cysteine protease (CASP7, Accession NP_203126.1) is another GAM7553 target gene, herein designated TARGET GENE. CASP7 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CASP7, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CASP7 BINDING SITE, designated SEQ ID:3279, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[50945] Another function of GAM7553 is therefore inhibition of Caspase 7, apoptosis-related cysteine protease (CASP7, Accession NP_203126.1), a gene which is an apoptosis-related caspase and involves in the activation of executing caspases. Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CASP7.

[50946] The function of CASP7 and its association with various

diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM408.2. Caveolin 1, caveolae protein, 22kda (CAV1, Accession NP_001744.2) is another GAM7553 target gene, herein designated TARGET GENE. CAV1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CAV1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CAV1 BINDING SITE, designated SEQ ID:16480, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[50947] Another function of GAM7553 is therefore inhibition of Caveolin 1, caveolae protein, 22kda (CAV1, Accession NP_001744.2), a gene which may act as a scaffolding protein within caveolar membranes, and interacts directly with g- protein alpha subunits and can functionally regulate their activity and therefore may be associated with Cancer. Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of Cancer, and of other diseases and clinical conditions associated with CAV1.

[50948] The function of CAV1 and its association with various dis-

eases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM342.2. Cholecystokinin b receptor (CCKBR, Accession NP_000722.2) is another GAM7553 target gene, herein designated TARGET GENE. CCKBR BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CCKBR, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CCKBR BINDING SITE, designated SEQ ID:12352, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[50949] Another function of GAM7553 is therefore inhibition of Cholecystokinin b receptor (CCKBR, Accession NP_000722.2), a gene which bonds cholecystokinin, regulates emotion and gastric acid secretion. Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CCKBR.

[50950] The function of CCKBR and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM44.1.Cholecystokinin b receptor (CCKBR, Accession NP_795344.1) is another GAM7553 target gene, herein designated TARGET GENE. CCKBR BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CCKBR, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CCKBR BINDING SITE, designated SEQ ID:12352, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[50951] Another function of GAM7553 is therefore inhibition of Cholecystokinin b receptor (CCKBR, Accession NP_795344.1), a gene which bonds cholecystokinin, regulates emotion and gastric acid secretion. Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CCKBR.

[50952] The function of CCKBR and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM44.1.Cdc-like kinase 2 (CLK2, Accession NP_001282.1) is another GAM7553 target gene, herein

designated TARGET GENE. CLK2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CLK2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CLK2 BINDING SITE, designated SEQ ID:8616, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[50953] Another function of GAM7553 is therefore inhibition of Cdc-like kinase 2 (CLK2, Accession NP_001282.1), a gene which catalyzes the phosphorylation of proteins. Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CLK2.

[50954] The function of CLK2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM291.1.COBL (Accession NP_056013.2) is another GAM7553 target gene, herein designated TARGET GENE. COBL BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by COBL, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of COBL BINDING SITE, designated SEQ ID:14286, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[50955] Another function of GAM7553 is therefore inhibition of COBL (Accession NP_056013.2) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with COBL.

[50956] Coronin, actin binding protein, 1c (CORO1C, Accession NP_055140.1) is another GAM7553 target gene, herein designated TARGET GENE. CORO1C BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CORO1C, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CORO1C BINDING SITE, designated SEQ ID:5674, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[50957] Another function of GAM7553 is therefore inhibition of Coronin, actin binding protein, 1c (CORO1C, Accession NP_055140.1) . Accordingly, utilities of GAM7553 include

diagnosis, prevention and treatment of diseases and clinical conditions associated with CORO1C.

[50958] Chemokine (c-x-c motif) ligand 12 (stromal cell-derived factor 1) (CXCL12, Accession NP_000600.1) is another GAM7553 target gene, herein designated TARGET GENE. CXCL12 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CXCL12, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CXCL12 BINDING SITE, designated SEQ ID:14753, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[50959] Another function of GAM7553 is therefore inhibition of Chemokine (c-x-c motif) ligand 12 (stromal cell-derived factor 1) (CXCL12, Accession NP_000600.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CXCL12.

[50960] Cytochrome p450, subfamily iib (phenobarbital-inducible), polypeptide 6 (CYP2B6, Accession NP_000758.1) is another GAM7553 target gene, herein designated TARGET GENE. CYP2B6 BINDING SITE is

a target binding site found in the 3' untranslated region of mRNA encoded by CYP2B6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CYP2B6 BINDING SITE, designated SEQ ID:7396, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[50961] Another function of GAM7553 is therefore inhibition of Cytochrome p450, subfamily iib (phenobarbital-inducible), polypeptide 6 (CYP2B6, Accession NP_000758.1), a gene which oxidizes a variety of structurally unrelated compounds, including steroids, fatty acids, and xenobiotics. Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CYP2B6.

[50962] The function of CYP2B6 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1.DKFZP564I0422 (Accession NP_113623.1) is another GAM7553 target gene, herein designated TARGET GENE. DKFZP564I0422 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded

by DKFZP564I0422, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP564I0422 BINDING SITE, designated SEQ ID:10761, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[50963] Another function of GAM7553 is therefore inhibition of DKFZP564I0422 (Accession NP_113623.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZP564I0422.

[50964] Dna (cytosine-5-)-methyltransferase 3 alpha (DNMT3A, Accession NP_072046.2) is another GAM7553 target gene, herein designated TARGET GENE. DNMT3A BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by DNMT3A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DNMT3A BINDING SITE, designated SEQ ID:17093, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[50965] Another function of GAM7553 is therefore inhibition of Dna (cytosine-5-)-methyltransferase 3 alpha (DNMT3A, Accession NP_072046.2), a gene which intervenes in de novo methylation of DNA. Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DNMT3A.

[50966] The function of DNMT3A and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM47.1. Dna (cytosine-5-)-methyltransferase 3 alpha (DNMT3A, Accession NP_715640.1) is another GAM7553 target gene, herein designated TARGET GENE. DNMT3A BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by DNMT3A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DNMT3A BINDING SITE, designated SEQ ID:17093, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[50967] Another function of GAM7553 is therefore inhibition of Dna (cytosine-5-)-methyltransferase 3 alpha (DNMT3A,

Accession NP_715640.1), a gene which intervenes in de novo methylation of DNA. Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DNMT3A.

[50968] The function of DNMT3A and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM47.1. Dna (cytosine-5-)-methyltransferase 3 alpha (DNMT3A, Accession NP_783328.1) is another GAM7553 target gene, herein designated TARGET GENE. DNMT3A BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by DNMT3A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DNMT3A BINDING SITE, designated SEQ ID:17093, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[50969] Another function of GAM7553 is therefore inhibition of Dna (cytosine-5-)-methyltransferase 3 alpha (DNMT3A, Accession NP_783328.1), a gene which intervenes in de novo methylation of DNA. Accordingly, utilities of

GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DNMT3A.

[50970] The function of DNMT3A and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM47.1.Echinoderm microtubule associated protein like 1 (EML1, Accession NP_004425.1) is another GAM7553 target gene, herein designated TARGET GENE. EML1 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by EML1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of EML1 BINDING SITE, designated SEQ ID:12454, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[50971] Another function of GAM7553 is therefore inhibition of Echinoderm microtubule associated protein like 1 (EML1, Accession NP_004425.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with EML1.

[50972] Epithelial membrane protein 1 (EMP1, Accession NP_001414.1) is another GAM7553 target gene, herein designated TARGET GENE. EMP1 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by EMP1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of EMP1 BINDING SITE, designated SEQ ID:3219, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[50973] Another function of GAM7553 is therefore inhibition of Epithelial membrane protein 1 (EMP1, Accession NP_001414.1), a gene which plays a role in squamous cell differentiation; member of the PMP22/EMP/MP20 family of membrane glycoproteins. Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with EMP1.

[50974] The function of EMP1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM40.1.FBXW5 (Accession NP_839890.1) is another GAM7553 target gene, herein designated TARGET GENE. FBXW5 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by FBXW5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FBXW5 BINDING SITE, designated SEQ ID:3849, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[50975] Another function of GAM7553 is therefore inhibition of FBXW5 (Accession NP_839890.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FBXW5.

[50976] FBXW5 (Accession NP_839891.1) is another GAM7553 target gene, herein designated TARGET GENE. FBXW5 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by FBXW5, corresponding to a target binding site such as

BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FBXW5 BINDING SITE, designated SEQ ID:3849, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[50977] Another function of GAM7553 is therefore inhibition of FBXW5 (Accession NP_839891.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FBXW5.

[50978] FLJ10120 (Accession NP_060471.1) is another GAM7553 target gene, herein designated TARGET GENE. FLJ10120 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ10120, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ10120 BINDING SITE, designated SEQ ID:16520, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[50979] Another function of GAM7553 is therefore inhibition of FLJ10120 (Accession NP_060471.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment

of diseases and clinical conditions associated with FLJ10120.

[50980] FLJ11142 (Accession NP_060808.2) is another GAM7553 target gene, herein designated TARGET GENE. FLJ11142 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ11142, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ11142 BINDING SITE, designated SEQ ID:16418, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[50981] Another function of GAM7553 is therefore inhibition of FLJ11142 (Accession NP_060808.2) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ11142.

[50982] FLJ12586 (Accession NP_078896.2) is another GAM7553 target gene, herein designated TARGET GENE. FLJ12586 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ12586, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of FLJ12586 BINDING SITE, designated SEQ ID:9318, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[50983] Another function of GAM7553 is therefore inhibition of FLJ12586 (Accession NP_078896.2) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ12586.

[50984] FLJ20156 (Accession NP_060161.1) is another GAM7553 target gene, herein designated TARGET GENE. FLJ20156 BINDING SITE1 and FLJ20156 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ20156, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20156 BINDING SITE1 and FLJ20156 BINDING SITE2, designated SEQ ID:15489 and SEQ ID:9513 respectively, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[50985] Another function of GAM7553 is therefore inhibition of FLJ20156 (Accession NP_060161.1) . Accordingly, utilities

of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20156.

[50986] FLJ20294 (Accession NP_060219.1) is another GAM7553 target gene, herein designated TARGET GENE. FLJ20294 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ20294, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20294 BINDING SITE, designated SEQ ID:9807, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[50987] Another function of GAM7553 is therefore inhibition of FLJ20294 (Accession NP_060219.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20294.

[50988] FLJ20582 (Accession XP_090970.4) is another GAM7553 target gene, herein designated TARGET GENE. FLJ20582 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FLJ20582, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20582 BINDING SITE, designated SEQ ID:9319, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[50989] Another function of GAM7553 is therefore inhibition of FLJ20582 (Accession XP_090970.4) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20582.

[50990] FLJ21588 (Accession NP_115580.2) is another GAM7553 target gene, herein designated TARGET GENE. FLJ21588 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ21588, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ21588 BINDING SITE, designated SEQ ID:7169, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[50991] Another function of GAM7553 is therefore inhibition of FLJ21588 (Accession NP_115580.2) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment

of diseases and clinical conditions associated with FLJ21588.

[50992] FLJ22625 (Accession NP_078991.2) is another GAM7553 target gene, herein designated TARGET GENE. FLJ22625 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FLJ22625, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ22625 BINDING SITE, designated SEQ ID:10995, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[50993] Another function of GAM7553 is therefore inhibition of FLJ22625 (Accession NP_078991.2) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ22625.

[50994] FLJ23375 (Accession NP_079232.2) is another GAM7553 target gene, herein designated TARGET GENE. FLJ23375 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FLJ23375, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of FLJ23375 BINDING SITE, designated SEQ ID:2294, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[50995] Another function of GAM7553 is therefore inhibition of FLJ23375 (Accession NP_079232.2) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ23375.

[50996] FLJ23467 (Accession NP_078851.1) is another GAM7553 target gene, herein designated TARGET GENE. FLJ23467 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ23467, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ23467 BINDING SITE, designated SEQ ID:6368, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[50997] Another function of GAM7553 is therefore inhibition of FLJ23467 (Accession NP_078851.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

FLJ23467.

[50998] FLJ23754 (Accession NP_689888.1) is another GAM7553 target gene, herein designated TARGET GENE. FLJ23754 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ23754, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ23754 BINDING SITE, designated SEQ ID:1290, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[50999] Another function of GAM7553 is therefore inhibition of FLJ23754 (Accession NP_689888.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ23754.

[51000] FLJ33318 (Accession NP_694961.1) is another GAM7553 target gene, herein designated TARGET GENE. FLJ33318 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ33318, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

FLJ33318 BINDING SITE, designated SEQ ID:17788, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51001] Another function of GAM7553 is therefore inhibition of FLJ33318 (Accession NP_694961.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ33318.

[51002] FLJ33708 (Accession NP_775946.1) is another GAM7553 target gene, herein designated TARGET GENE. FLJ33708 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ33708, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ33708 BINDING SITE, designated SEQ ID:11952, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51003] Another function of GAM7553 is therefore inhibition of FLJ33708 (Accession NP_775946.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ33708.

[51004] FLJ37034 (Accession NP_689734.1) is another GAM7553 target gene, herein designated TARGET GENE. FLJ37034 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ37034, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ37034 BINDING SITE, designated SEQ ID:13349, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51005] Another function of GAM7553 is therefore inhibition of FLJ37034 (Accession NP_689734.1). Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ37034.

[51006] FUK (Accession NP_659496.1) is another GAM7553 target gene, herein designated TARGET GENE. FUK BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FUK, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FUK BINDING SITE, designated SEQ ID:13518, to the nucleotide se-

quence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51007] Another function of GAM7553 is therefore inhibition of FUK (Accession NP_659496.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FUK.

[51008] Fyve and coiled-coil domain containing 1 (FYCO1, Accession NP_078789.1) is another GAM7553 target gene, herein designated TARGET GENE. FYCO1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FYCO1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FYCO1 BINDING SITE, designated SEQ ID:1084, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51009] Another function of GAM7553 is therefore inhibition of Fyve and coiled-coil domain containing 1 (FYCO1, Accession NP_078789.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FYCO1.

[51010] Glucose-6-phosphatase, transport (glucose-6-phosphate)

protein 1 (G6PT1, Accession NP_001458.1) is another GAM7553 target gene, herein designated TARGET GENE. G6PT1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by G6PT1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of G6PT1 BINDING SITE, designated SEQ ID:13519, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51011] Another function of GAM7553 is therefore inhibition of Glucose-6-phosphatase, transport (glucose-6-phosphate) protein 1 (G6PT1, Accession NP_001458.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with G6PT1.

[51012] Gata binding protein 6 (GATA6, Accession NP_005248.1) is another GAM7553 target gene, herein designated TARGET GENE. GATA6 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GATA6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of GATA6 BINDING SITE, designated SEQ ID:2438, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51013] Another function of GAM7553 is therefore inhibition of Gata binding protein 6 (GATA6, Accession NP_005248.1), a gene which is thought to be important for regulating terminal differentiation and/or proliferation. and therefore may be associated with Sex cord- derived ovarian tumors. Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of Sex cord- derived ovarian tumors., and of other diseases and clinical conditions associated with GATA6.

[51014] The function of GATA6 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM488.1.GATS (Accession NP_849153.1) is another GAM7553 target gene, herein designated TARGET GENE. GATS BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GATS, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

GATS BINDING SITE, designated SEQ ID:5950, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51015] Another function of GAM7553 is therefore inhibition of GATS (Accession NP_849153.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GATS.

[51016] Golgi apparatus protein 1 (GLG1, Accession NP_036333.1) is another GAM7553 target gene, herein designated TARGET GENE. GLG1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GLG1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GLG1 BINDING SITE, designated SEQ ID:1019, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51017] Another function of GAM7553 is therefore inhibition of Golgi apparatus protein 1 (GLG1, Accession NP_036333.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GLG1.

[51018] Guanosine monophosphate reductase 2 (GMPR2, Acces-

sion NP_057660.1) is another GAM7553 target gene, herein designated TARGET GENE. GMPR2 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by GMPR2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GMPR2 BINDING SITE, designated SEQ ID:8654, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51019] Another function of GAM7553 is therefore inhibition of Guanosine monophosphate reductase 2 (GMPR2, Accession NP_057660.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GMPR2.

[51020] GOR (Accession NP_758439.1) is another GAM7553 target gene, herein designated TARGET GENE. GOR BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by GOR, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GOR BINDING SITE, designated SEQ ID:7795, to the nucleotide sequence

of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51021] Another function of GAM7553 is therefore inhibition of GOR (Accession NP_758439.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GOR.

[51022] Glutamate receptor, ionotropic, ampa 1 (GRIA1, Accession NP_000818.1) is another GAM7553 target gene, herein designated TARGET GENE. GRIA1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GRIA1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GRIA1 BINDING SITE, designated SEQ ID:8118, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51023] Another function of GAM7553 is therefore inhibition of Glutamate receptor, ionotropic, ampa 1 (GRIA1, Accession NP_000818.1), a gene which acts as an excitatory neurotransmitter at many synapses in the central nervous system. Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical condi-

tions associated with GRIA1.

[51024] The function of GRIA1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM412.1.Homeo box b8 (HOXB8, Accession NP_076921.1) is another GAM7553 target gene, herein designated TARGET GENE. HOXB8 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HOXB8, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HOXB8 BINDING SITE, designated SEQ ID:19126, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51025] Another function of GAM7553 is therefore inhibition of Homeo box b8 (HOXB8, Accession NP_076921.1), a gene which is part of a developmental regulatory system. Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HOXB8.

[51026] The function of HOXB8 and its association with various diseases and clinical conditions, has been established by

previous studies, as described hereinabove with reference to GAM47.1.Heparanase (HPSE, Accession NP_006656.1) is another GAM7553 target gene, herein designated TARGET GENE. HPSE BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HPSE, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HPSE BINDING SITE, designated SEQ ID:15551, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51027] Another function of GAM7553 is therefore inhibition of Heparanase (HPSE, Accession NP_006656.1), a gene which is an endoglycosidase that cleaves heparan sulfate, and therefore may be associated with Breast cancer. Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of Breast cancer, and of other diseases and clinical conditions associated with HPSE.

[51028] The function of HPSE and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM66.2.HSC3 (Accession NP_660157.1) is another GAM7553 target gene, herein designated TARGET GENE.

HSC3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HSC3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HSC3 BINDING SITE, designated SEQ ID:9997, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51029] Another function of GAM7553 is therefore inhibition of HSC3 (Accession NP_660157.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HSC3.

[51030] Hydroxy- Δ^5 -steroid dehydrogenase, 3 β - and steroid Δ^5 -isomerase 1 (HSD3B1, Accession NP_000853.1) is another GAM7553 target gene, herein designated TARGET GENE. HSD3B1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HSD3B1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HSD3B1 BINDING SITE, designated SEQ ID:13457, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA,

also designated SEQ ID:354.

[51031] Another function of GAM7553 is therefore inhibition of Hydroxy- Δ^5 -steroid dehydrogenase, 3 β - and steroid Δ^5 -isomerase 1 (HSD3B1, Accession NP_000853.1), a gene which is a 3 β -hydroxysteroid dehydrogenase. Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HSD3B1.

[51032] The function of HSD3B1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM507.1.HSPC063 (Accession NP_054874.1) is another GAM7553 target gene, herein designated TARGET GENE. HSPC063 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HSPC063, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HSPC063 BINDING SITE, designated SEQ ID:5807, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51033] Another function of GAM7553 is therefore inhibition of

HSPC063 (Accession NP_054874.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HSPC063.

[51034] HSPC065 (Accession NP_054876.2) is another GAM7553 target gene, herein designated TARGET GENE. HSPC065 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HSPC065, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HSPC065 BINDING SITE, designated SEQ ID:1070, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51035] Another function of GAM7553 is therefore inhibition of HSPC065 (Accession NP_054876.2) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HSPC065.

[51036] Isoleucine-trna synthetase (IARS, Accession NP_002152.1) is another GAM7553 target gene, herein designated TARGET GENE. IARS BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts

of mRNA encoded by IARS, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IARS BINDING SITE, designated SEQ ID:8969, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51037] Another function of GAM7553 is therefore inhibition of Isoleucine-trna synthetase (IARS, Accession NP_002152.1), a gene which functions in protein biosynthesis. Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with IARS.

[51038] The function of IARS and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM291.1.Isoleucine-trna synthetase (IARS, Accession NP_038203.1) is another GAM7553 target gene, herein designated TARGET GENE. IARS BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by IARS, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the

complementarity of the nucleotide sequences of IARS BINDING SITE, designated SEQ ID:8969, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51039] Another function of GAM7553 is therefore inhibition of Isoleucine-trna synthetase (IARS, Accession NP_038203.1), a gene which functions in protein biosynthesis. Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with IARS.

[51040] The function of IARS and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM291.1. Interleukin 22 receptor, alpha 2 (IL22RA2, Accession NP_443194.1) is another GAM7553 target gene, herein designated TARGET GENE. IL22RA2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by IL22RA2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IL22RA2 BINDING SITE, designated SEQ ID:8508, to the nucleotide sequence of GAM7553 RNA, herein designated

GAM RNA, also designated SEQ ID:354.

[51041] Another function of GAM7553 is therefore inhibition of Interleukin 22 receptor, alpha 2 (IL22RA2, Accession NP_443194.1), a gene which induces the production of acute- phase reactants. Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with IL22RA2.

[51042] The function of IL22RA2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM291.1. Interleukin 22 receptor, alpha 2 (IL22RA2, Accession NP_851827.1) is another GAM7553 target gene, herein designated TARGET GENE. IL22RA2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by IL22RA2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IL22RA2 BINDING SITE, designated SEQ ID:8508, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51043] Another function of GAM7553 is therefore inhibition of Interleukin 22 receptor, alpha 2 (IL22RA2, Accession

NP_851827.1), a gene which induces the production of acute- phase reactants. Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with IL22RA2.

[51044] The function of IL22RA2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM291.1. Interleukin 22 receptor, alpha 2 (IL22RA2, Accession NP_851826.1) is another GAM7553 target gene, herein designated TARGET GENE. IL22RA2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by IL22RA2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IL22RA2 BINDING SITE, designated SEQ ID:8508, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51045] Another function of GAM7553 is therefore inhibition of Interleukin 22 receptor, alpha 2 (IL22RA2, Accession NP_851826.1), a gene which induces the production of acute- phase reactants. Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases

and clinical conditions associated with IL22RA2.

[51046] The function of IL22RA2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM291.1. Potassium voltage-gated channel, Isk-related family, member 3 (KCNE3, Accession NP_005463.1) is another GAM7553 target gene, herein designated TARGET GENE. KCNE3 BINDING SITE1 and KCNE3 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by KCNE3, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KCNE3 BINDING SITE1 and KCNE3 BINDING SITE2, designated SEQ ID:15160 and SEQ ID:682 respectively, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51047] Another function of GAM7553 is therefore inhibition of Potassium voltage-gated channel, Isk-related family, member 3 (KCNE3, Accession NP_005463.1), a gene which encodes an ancillary protein that co-assembles with a potassium channel α -subunit to modulate the gating kinetics and enhance stability of the multimeric complex (by simi-

larity). and therefore may be associated with Hypokalemic periodic paralysis. Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of Hypokalemic periodic paralysis, and of other diseases and clinical conditions associated with KCNE3.

[51048] The function of KCNE3 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM234.1.KIAA0205 (Accession NP_055688.1) is another GAM7553 target gene, herein designated TARGET GENE. KIAA0205 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0205, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0205 BINDING SITE, designated SEQ ID:8043, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51049] Another function of GAM7553 is therefore inhibition of KIAA0205 (Accession NP_055688.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

KIAA0205.

[51050] KIAA0255 (Accession NP_055557.1) is another GAM7553 target gene, herein designated TARGET GENE. KIAA0255 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0255, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0255 BINDING SITE, designated SEQ ID:3428, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51051] Another function of GAM7553 is therefore inhibition of KIAA0255 (Accession NP_055557.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0255.

[51052] KIAA0495 (Accession XP_031397.1) is another GAM7553 target gene, herein designated TARGET GENE. KIAA0495 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0495, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

KIAA0495 BINDING SITE, designated SEQ ID:5785, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51053] Another function of GAM7553 is therefore inhibition of KIAA0495 (Accession XP_031397.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0495.

[51054] KIAA0802 (Accession XP_031357.4) is another GAM7553 target gene, herein designated TARGET GENE. KIAA0802 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0802, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0802 BINDING SITE, designated SEQ ID:6556, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51055] Another function of GAM7553 is therefore inhibition of KIAA0802 (Accession XP_031357.4) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0802.

[51056] KIAA1920 (Accession XP_085210.1) is another GAM7553 target gene, herein designated TARGET GENE. KIAA1920 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by KIAA1920, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1920 BINDING SITE, designated SEQ ID:6303, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51057] Another function of GAM7553 is therefore inhibition of KIAA1920 (Accession XP_085210.1). Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1920.

[51058] LCMT2 (Accession NP_055608.2) is another GAM7553 target gene, herein designated TARGET GENE. LCMT2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LCMT2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LCMT2 BINDING SITE, designated SEQ ID:14172, to the nucleotide

sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51059] Another function of GAM7553 is therefore inhibition of LCMT2 (Accession NP_055608.2) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LCMT2.

[51060] Lipoma hmgic fusion partner-like 2 (LHFPL2, Accession XP_046054.1) is another GAM7553 target gene, herein designated TARGET GENE. LHFPL2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LHFPL2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LHFPL2 BINDING SITE, designated SEQ ID:6663, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51061] Another function of GAM7553 is therefore inhibition of Lipoma hmgic fusion partner-like 2 (LHFPL2, Accession XP_046054.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LHFPL2.

[51062] LOC120224 (Accession NP_620143.1) is another

GAM7553 target gene, herein designated TARGET GENE. LOC120224 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC120224, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC120224 BINDING SITE, designated SEQ ID:17035, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51063] Another function of GAM7553 is therefore inhibition of LOC120224 (Accession NP_620143.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC120224.

[51064] LOC138649 (Accession XP_059987.2) is another GAM7553 target gene, herein designated TARGET GENE. LOC138649 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC138649, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC138649 BINDING SITE, design-

nated SEQ ID:9140, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51065] Another function of GAM7553 is therefore inhibition of LOC138649 (Accession XP_059987.2) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC138649.

[51066] LOC144438 (Accession XP_084860.1) is another GAM7553 target gene, herein designated TARGET GENE. LOC144438 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC144438, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC144438 BINDING SITE, designated SEQ ID:2439, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51067] Another function of GAM7553 is therefore inhibition of LOC144438 (Accession XP_084860.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC144438.

[51068] LOC145921 (Accession XP_071845.2) is another GAM7553 target gene, herein designated TARGET GENE. LOC145921 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC145921, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC145921 BINDING SITE, designated SEQ ID:8430, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51069] Another function of GAM7553 is therefore inhibition of LOC145921 (Accession XP_071845.2) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC145921.

[51070] LOC149149 (Accession XP_097598.1) is another GAM7553 target gene, herein designated TARGET GENE. LOC149149 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC149149, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC149149 BINDING SITE, designated SEQ ID:14584, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51071] Another function of GAM7553 is therefore inhibition of LOC149149 (Accession XP_097598.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC149149.

[51072] LOC150759 (Accession NP_787049.1) is another GAM7553 target gene, herein designated TARGET GENE. LOC150759 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC150759, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC150759 BINDING SITE, designated SEQ ID:5023, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51073] Another function of GAM7553 is therefore inhibition of LOC150759 (Accession NP_787049.1) . Accordingly, utili-

ties of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC150759.

[51074] LOC153959 (Accession XP_098450.1) is another GAM7553 target gene, herein designated TARGET GENE. LOC153959 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC153959, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC153959 BINDING SITE, designated SEQ ID:19972, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51075] Another function of GAM7553 is therefore inhibition of LOC153959 (Accession XP_098450.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC153959.

[51076] LOC155036 (Accession XP_098651.1) is another GAM7553 target gene, herein designated TARGET GENE. LOC155036 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by

LOC155036, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC155036 BINDING SITE, designated SEQ ID:19733, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51077] Another function of GAM7553 is therefore inhibition of LOC155036 (Accession XP_098651.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC155036.

[51078] LOC200399 (Accession XP_114226.1) is another GAM7553 target gene, herein designated TARGET GENE. LOC200399 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC200399, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC200399 BINDING SITE, designated SEQ ID:3065, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51079] Another function of GAM7553 is therefore inhibition of LOC200399 (Accession XP_114226.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC200399.

[51080] LOC201501 (Accession XP_113971.1) is another GAM7553 target gene, herein designated TARGET GENE. LOC201501 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC201501, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC201501 BINDING SITE, designated SEQ ID:9241, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51081] Another function of GAM7553 is therefore inhibition of LOC201501 (Accession XP_113971.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC201501.

[51082] LOC220686 (Accession XP_167540.4) is another GAM7553 target gene, herein designated TARGET GENE.

LOC220686 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC220686, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC220686 BINDING SITE, designated SEQ ID:5260, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51083] Another function of GAM7553 is therefore inhibition of LOC220686 (Accession XP_167540.4) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC220686.

[51084] LOC221495 (Accession XP_168136.1) is another GAM7553 target gene, herein designated TARGET GENE. LOC221495 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC221495, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC221495 BINDING SITE, designated SEQ ID:2379, to the nucleotide sequence of

GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51085] Another function of GAM7553 is therefore inhibition of LOC221495 (Accession XP_168136.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC221495.

[51086] LOC221922 (Accession XP_166555.2) is another GAM7553 target gene, herein designated TARGET GENE. LOC221922 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC221922, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC221922 BINDING SITE, designated SEQ ID:19315, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51087] Another function of GAM7553 is therefore inhibition of LOC221922 (Accession XP_166555.2) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC221922.

[51088] LOC221938 (Accession XP_166542.2) is another GAM7553 target gene, herein designated TARGET GENE. LOC221938 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC221938, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC221938 BINDING SITE, designated SEQ ID:13252, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51089] Another function of GAM7553 is therefore inhibition of LOC221938 (Accession XP_166542.2) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC221938.

[51090] LOC253982 (Accession XP_170804.3) is another GAM7553 target gene, herein designated TARGET GENE. LOC253982 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC253982, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC253982 BINDING SITE, designated SEQ ID:11790, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51091] Another function of GAM7553 is therefore inhibition of LOC253982 (Accession XP_170804.3) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC253982.

[51092] LOC283487 (Accession XP_211062.1) is another GAM7553 target gene, herein designated TARGET GENE. LOC283487 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by LOC283487, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283487 BINDING SITE, designated SEQ ID:19068, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51093] Another function of GAM7553 is therefore inhibition of LOC283487 (Accession XP_211062.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC283487.

[51094] LOC283686 (Accession XP_211164.1) is another GAM7553 target gene, herein designated TARGET GENE. LOC283686 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC283686, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283686 BINDING SITE, designated SEQ ID:15683, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51095] Another function of GAM7553 is therefore inhibition of LOC283686 (Accession XP_211164.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283686.

[51096] LOC283868 (Accession XP_211243.1) is another GAM7553 target gene, herein designated TARGET GENE. LOC283868 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC283868, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283868 BINDING SITE, designated SEQ ID:20068, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51097] Another function of GAM7553 is therefore inhibition of LOC283868 (Accession XP_211243.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283868.

[51098] LOC283925 (Accession XP_208907.1) is another GAM7553 target gene, herein designated TARGET GENE. LOC283925 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC283925, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283925 BINDING SITE, designated SEQ ID:12361, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51099] Another function of GAM7553 is therefore inhibition of

LOC283925 (Accession XP_208907.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283925.

[51100] LOC284080 (Accession XP_211322.1) is another GAM7553 target gene, herein designated TARGET GENE. LOC284080 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC284080, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284080 BINDING SITE, designated SEQ ID:4066, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51101] Another function of GAM7553 is therefore inhibition of LOC284080 (Accession XP_211322.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284080.

[51102] LOC284693 (Accession XP_209323.1) is another GAM7553 target gene, herein designated TARGET GENE. LOC284693 BINDING SITE is a target binding site found in

the 5' untranslated region of mRNA encoded by LOC284693, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284693 BINDING SITE, designated SEQ ID:1014, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51103] Another function of GAM7553 is therefore inhibition of LOC284693 (Accession XP_209323.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284693.

[51104] LOC284994 (Accession XP_209434.1) is another GAM7553 target gene, herein designated TARGET GENE. LOC284994 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284994, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284994 BINDING SITE, designated SEQ ID:5023, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also design-

nated SEQ ID:354.

[51105] Another function of GAM7553 is therefore inhibition of LOC284994 (Accession XP_209434.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284994.

[51106] LOC285166 (Accession XP_211791.1) is another GAM7553 target gene, herein designated TARGET GENE. LOC285166 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285166, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285166 BINDING SITE, designated SEQ ID:14257, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51107] Another function of GAM7553 is therefore inhibition of LOC285166 (Accession XP_211791.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285166.

[51108] LOC285484 (Accession XP_209630.1) is another

GAM7553 target gene, herein designated TARGET GENE. LOC285484 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285484, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285484 BINDING SITE, designated SEQ ID:5962, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51109] Another function of GAM7553 is therefore inhibition of LOC285484 (Accession XP_209630.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285484.

[51110] LOC285729 (Accession XP_212001.1) is another GAM7553 target gene, herein designated TARGET GENE. LOC285729 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285729, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285729 BINDING SITE, design-

nated SEQ ID:15629, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51111] Another function of GAM7553 is therefore inhibition of LOC285729 (Accession XP_212001.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285729.

[51112] LOC285831 (Accession XP_212625.1) is another GAM7553 target gene, herein designated TARGET GENE. LOC285831 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by LOC285831, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285831 BINDING SITE, designated SEQ ID:5709, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51113] Another function of GAM7553 is therefore inhibition of LOC285831 (Accession XP_212625.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC285831.

[51114] LOC285831 (Accession XP_212577.1) is another GAM7553 target gene, herein designated TARGET GENE. LOC285831 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by LOC285831, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285831 BINDING SITE, designated SEQ ID:5709, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51115] Another function of GAM7553 is therefore inhibition of LOC285831 (Accession XP_212577.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285831.

[51116] LOC285831 (Accession XP_209784.1) is another GAM7553 target gene, herein designated TARGET GENE. LOC285831 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by LOC285831, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or

BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285831 BINDING SITE, designated SEQ ID:5709, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51117] Another function of GAM7553 is therefore inhibition of LOC285831 (Accession XP_209784.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285831.

[51118] LOC338862 (Accession XP_290601.1) is another GAM7553 target gene, herein designated TARGET GENE. LOC338862 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC338862, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338862 BINDING SITE, designated SEQ ID:2464, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51119] Another function of GAM7553 is therefore inhibition of LOC338862 (Accession XP_290601.1) . Accordingly, utili-

ties of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC338862.

[51120] LOC338866 (Accession XP_294736.1) is another GAM7553 target gene, herein designated TARGET GENE. LOC338866 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC338866, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338866 BINDING SITE, designated SEQ ID:5837, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51121] Another function of GAM7553 is therefore inhibition of LOC338866 (Accession XP_294736.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC338866.

[51122] LOC338909 (Accession XP_294744.1) is another GAM7553 target gene, herein designated TARGET GENE. LOC338909 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by

LOC338909, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338909 BINDING SITE, designated SEQ ID:11382, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51123] Another function of GAM7553 is therefore inhibition of LOC338909 (Accession XP_294744.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC338909.

[51124] LOC338981 (Accession XP_294767.2) is another GAM7553 target gene, herein designated TARGET GENE. LOC338981 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC338981, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338981 BINDING SITE, designated SEQ ID:10252, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51125] Another function of GAM7553 is therefore inhibition of LOC338981 (Accession XP_294767.2) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC338981.

[51126] LOC339290 (Accession XP_294901.1) is another GAM7553 target gene, herein designated TARGET GENE. LOC339290 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC339290, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339290 BINDING SITE, designated SEQ ID:14173, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51127] Another function of GAM7553 is therefore inhibition of LOC339290 (Accession XP_294901.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339290.

[51128] LOC339789 (Accession XP_295067.1) is another GAM7553 target gene, herein designated TARGET GENE.

LOC339789 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339789, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339789 BINDING SITE, designated SEQ ID:19316, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51129] Another function of GAM7553 is therefore inhibition of LOC339789 (Accession XP_295067.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339789.

[51130] LOC339832 (Accession XP_295079.1) is another GAM7553 target gene, herein designated TARGET GENE. LOC339832 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC339832, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339832 BINDING SITE, designated SEQ ID:2461, to the nucleotide sequence of

GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51131] Another function of GAM7553 is therefore inhibition of LOC339832 (Accession XP_295079.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339832.

[51132] LOC339872 (Accession XP_291050.1) is another GAM7553 target gene, herein designated TARGET GENE. LOC339872 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC339872, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339872 BINDING SITE, designated SEQ ID:6271, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51133] Another function of GAM7553 is therefore inhibition of LOC339872 (Accession XP_291050.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339872.

[51134] LOC340449 (Accession XP_290424.2) is another GAM7553 target gene, herein designated TARGET GENE. LOC340449 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC340449, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340449 BINDING SITE, designated SEQ ID:7795, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51135] Another function of GAM7553 is therefore inhibition of LOC340449 (Accession XP_290424.2) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340449.

[51136] LOC342663 (Accession XP_297028.1) is another GAM7553 target gene, herein designated TARGET GENE. LOC342663 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC342663, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC342663 BINDING SITE, designated SEQ ID:2579, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51137] Another function of GAM7553 is therefore inhibition of LOC342663 (Accession XP_297028.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC342663.

[51138] LOC344886 (Accession XP_298385.1) is another GAM7553 target gene, herein designated TARGET GENE. LOC344886 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC344886, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC344886 BINDING SITE, designated SEQ ID:20037, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51139] Another function of GAM7553 is therefore inhibition of LOC344886 (Accession XP_298385.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC344886.

[51140] LOC348127 (Accession XP_302662.1) is another GAM7553 target gene, herein designated TARGET GENE. LOC348127 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC348127, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348127 BINDING SITE, designated SEQ ID:10252, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51141] Another function of GAM7553 is therefore inhibition of LOC348127 (Accession XP_302662.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348127.

[51142] LOC348130 (Accession XP_302666.1) is another GAM7553 target gene, herein designated TARGET GENE. LOC348130 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC348130, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348130 BINDING SITE, designated SEQ ID:10252, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51143] Another function of GAM7553 is therefore inhibition of LOC348130 (Accession XP_302666.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348130.

[51144] LOC348544 (Accession XP_300243.1) is another GAM7553 target gene, herein designated TARGET GENE. LOC348544 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC348544, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348544 BINDING SITE, designated SEQ ID:10979, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51145] Another function of GAM7553 is therefore inhibition of

LOC348544 (Accession XP_300243.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348544.

[51146] LOC348600 (Accession XP_300790.1) is another GAM7553 target gene, herein designated TARGET GENE. LOC348600 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC348600, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348600 BINDING SITE, designated SEQ ID:5260, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51147] Another function of GAM7553 is therefore inhibition of LOC348600 (Accession XP_300790.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348600.

[51148] LOC349140 (Accession XP_291247.1) is another GAM7553 target gene, herein designated TARGET GENE. LOC349140 BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by LOC349140, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349140 BINDING SITE, designated SEQ ID:3138, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51149] Another function of GAM7553 is therefore inhibition of LOC349140 (Accession XP_291247.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349140.

[51150] LOC349287 (Accession XP_301010.1) is another GAM7553 target gene, herein designated TARGET GENE. LOC349287 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC349287, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349287 BINDING SITE, designated SEQ ID:17133, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also design-

nated SEQ ID:354.

[51151] Another function of GAM7553 is therefore inhibition of LOC349287 (Accession XP_301010.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349287.

[51152] LOC349309 (Accession XP_301020.1) is another GAM7553 target gene, herein designated TARGET GENE. LOC349309 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC349309, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349309 BINDING SITE, designated SEQ ID:15332, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51153] Another function of GAM7553 is therefore inhibition of LOC349309 (Accession XP_301020.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349309.

[51154] LOC80298 (Accession NP_079474.2) is another GAM7553

target gene, herein designated TARGET GENE. LOC80298 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC80298, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC80298 BINDING SITE, designated SEQ ID:19304, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51155] Another function of GAM7553 is therefore inhibition of LOC80298 (Accession NP_079474.2) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC80298.

[51156] LOC85026 (Accession NP_116326.1) is another GAM7553 target gene, herein designated TARGET GENE. LOC85026 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC85026, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC85026 BINDING SITE, designated SEQ ID:13738, to the nucleotide sequence of GAM7553 RNA, herein designated

GAM RNA, also designated SEQ ID:354.

- [51157] Another function of GAM7553 is therefore inhibition of LOC85026 (Accession NP_116326.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC85026.
- [51158] LOC90906 (Accession XP_034809.1) is another GAM7553 target gene, herein designated TARGET GENE. LOC90906 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC90906, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC90906 BINDING SITE, designated SEQ ID:15110, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.
- [51159] Another function of GAM7553 is therefore inhibition of LOC90906 (Accession XP_034809.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC90906.
- [51160] MBNL2 (Accession NP_005748.1) is another GAM7553 target gene, herein designated TARGET GENE. MBNL2 BIND-

ING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by MBNL2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MBNL2 BINDING SITE, designated SEQ ID:5708, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51161] Another function of GAM7553 is therefore inhibition of MBNL2 (Accession NP_005748.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MBNL2.

[51162] MBNL2 (Accession NP_659002.1) is another GAM7553 target gene, herein designated TARGET GENE. MBNL2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by MBNL2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MBNL2 BINDING SITE, designated SEQ ID:5708, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ

ID:354.

[51163] Another function of GAM7553 is therefore inhibition of MBNL2 (Accession NP_659002.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MBNL2.

[51164] Microfibrillar-associated protein 1 (MFAP1, Accession NP_005917.1) is another GAM7553 target gene, herein designated TARGET GENE. MFAP1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MFAP1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MFAP1 BINDING SITE, designated SEQ ID:18621, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51165] Another function of GAM7553 is therefore inhibition of Microfibrillar-associated protein 1 (MFAP1, Accession NP_005917.1), a gene which are an important component of the extracellular matrix of many tissues. Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MFAP1.

[51166] The function of MFAP1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM572.1.MGC10233 (Accession NP_689928.1) is another GAM7553 target gene, herein designated TARGET GENE. MGC10233 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MGC10233, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC10233 BINDING SITE, designated SEQ ID:3443, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51167] Another function of GAM7553 is therefore inhibition of MGC10233 (Accession NP_689928.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC10233.

[51168] MGC11386 (Accession NP_116322.1) is another GAM7553 target gene, herein designated TARGET GENE. MGC11386 BINDING SITE1 through MGC11386 BINDING SITE3 are target binding sites found in untranslated regions of mRNA

encoded by MGC11386, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC11386 BINDING SITE1 through MGC11386 BINDING SITE3, designated SEQ ID:5617, SEQ ID:11951 and SEQ ID:13670 respectively, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51169] Another function of GAM7553 is therefore inhibition of MGC11386 (Accession NP_116322.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC11386.

[51170] MGC13114 (Accession NP_115742.2) is another GAM7553 target gene, herein designated TARGET GENE. MGC13114 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC13114, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC13114 BINDING SITE, designated SEQ ID:11612, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51171] Another function of GAM7553 is therefore inhibition of MGC13114 (Accession NP_115742.2) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC13114.

[51172] MGC13251 (Accession NP_116103.1) is another GAM7553 target gene, herein designated TARGET GENE. MGC13251 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC13251, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC13251 BINDING SITE, designated SEQ ID:18632, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51173] Another function of GAM7553 is therefore inhibition of MGC13251 (Accession NP_116103.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC13251.

[51174] MGC16186 (Accession NP_115748.1) is another GAM7553 target gene, herein designated TARGET GENE. MGC16186 BINDING SITE is a target binding site found in the 5' un-

translated region of mRNA encoded by MGC16186, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC16186 BINDING SITE, designated SEQ ID:10586, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51175] Another function of GAM7553 is therefore inhibition of MGC16186 (Accession NP_115748.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC16186.

[51176] MGC21854 (Accession NP_443094.2) is another GAM7553 target gene, herein designated TARGET GENE. MGC21854 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC21854, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC21854 BINDING SITE, designated SEQ ID:11923, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51177] Another function of GAM7553 is therefore inhibition of

MGC21854 (Accession NP_443094.2) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC21854.

[51178] MGC26885 (Accession NP_689552.2) is another GAM7553 target gene, herein designated TARGET GENE. MGC26885 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC26885, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC26885 BINDING SITE, designated SEQ ID:11130, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51179] Another function of GAM7553 is therefore inhibition of MGC26885 (Accession NP_689552.2) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC26885.

[51180] MGC3020 (Accession NP_076953.2) is another GAM7553 target gene, herein designated TARGET GENE. MGC3020 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC3020, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC3020 BINDING SITE, designated SEQ ID:13408, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51181] Another function of GAM7553 is therefore inhibition of MGC3020 (Accession NP_076953.2) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC3020.

[51182] MGC3040 (Accession XP_039805.6) is another GAM7553 target gene, herein designated TARGET GENE. MGC3040 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC3040, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC3040 BINDING SITE, designated SEQ ID:11387, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51183] Another function of GAM7553 is therefore inhibition of MGC3040 (Accession XP_039805.6) . Accordingly, utilities

of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC3040.

[51184] MGC34761 (Accession NP_775890.1) is another GAM7553 target gene, herein designated TARGET GENE. MGC34761 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MGC34761, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC34761 BINDING SITE, designated SEQ ID:10760, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51185] Another function of GAM7553 is therefore inhibition of MGC34761 (Accession NP_775890.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC34761.

[51186] MGC35048 (Accession NP_694940.1) is another GAM7553 target gene, herein designated TARGET GENE. MGC35048 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC35048, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC35048 BINDING SITE, designated SEQ ID:17290, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51187] Another function of GAM7553 is therefore inhibition of MGC35048 (Accession NP_694940.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC35048.

[51188] Nadh dehydrogenase 4I (MTND4L, Accession NP_776060.1) is another GAM7553 target gene, herein designated TARGET GENE. MTND4L BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MTND4L, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MTND4L BINDING SITE, designated SEQ ID:1170, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51189] Another function of GAM7553 is therefore inhibition of Nadh dehydrogenase 4I (MTND4L, Accession

NP_776060.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MTND4L.

[51190] Myeloma overexpressed gene (in a subset of t(11;14) positive multiple myelomas) (MYEOV, Accession NP_620123.1) is another GAM7553 target gene, herein designated TARGET GENE. MYEOV BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MYEOV, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MYEOV BINDING SITE, designated SEQ ID:1311, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51191] Another function of GAM7553 is therefore inhibition of Myeloma overexpressed gene (in a subset of t(11;14) positive multiple myelomas) (MYEOV, Accession NP_620123.1), a gene which is encoded by MYELOMA OVEREXPRESSED GENE. and therefore may be associated with Multiple myeloma. Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of Multiple myeloma, and of other diseases and clinical conditions

associated with MYEOV.

[51192] The function of MYEOV and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM842.2.NPCR (Accession NP_660361.1) is another GAM7553 target gene, herein designated TARGET GENE. NPCR BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by NPCR, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NPCR BINDING SITE, designated SEQ ID:2329, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51193] Another function of GAM7553 is therefore inhibition of NPCR (Accession NP_660361.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NPCR.

[51194] OIP5 (Accession NP_009211.1) is another GAM7553 target gene, herein designated TARGET GENE. OIP5 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by OIP5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or

BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of OIP5 BINDING SITE, designated SEQ ID:14429, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51195] Another function of GAM7553 is therefore inhibition of OIP5 (Accession NP_009211.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with OIP5.

[51196] P5326 (Accession NP_113638.1) is another GAM7553 target gene, herein designated TARGET GENE. P5326 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by P5326, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of P5326 BINDING SITE, designated SEQ ID:5216, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51197] Another function of GAM7553 is therefore inhibition of P5326 (Accession NP_113638.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with P5326.

[51198] Proprotein convertase subtilisin/kexin type 1 (PCSK1, Accession NP_000430.3) is another GAM7553 target gene, herein designated TARGET GENE. PCSK1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PCSK1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PCSK1 BINDING SITE, designated SEQ ID:5073, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51199] Another function of GAM7553 is therefore inhibition of Proprotein convertase subtilisin/kexin type 1 (PCSK1, Accession NP_000430.3), a gene which processes hormone precursors by cleaving paired basic amino acids; serine protease of the subtilase family. and therefore may be associated with Obesity . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of Obesity ., and of other diseases and clinical conditions associated with PCSK1.

[51200] The function of PCSK1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM346.1.PH-4 (Accession NP_060202.2) is another GAM7553 target gene, herein designated TARGET GENE. PH-4 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PH-4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PH-4 BINDING SITE, designated SEQ ID:6158, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51201] Another function of GAM7553 is therefore inhibition of PH-4 (Accession NP_060202.2) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PH-4.

[51202] Phosphatidylinositol 4-kinase, catalytic, beta polypeptide (PIK4CB, Accession NP_002642.1) is another GAM7553 target gene, herein designated TARGET GENE. PIK4CB BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PIK4CB, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

PIK4CB BINDING SITE, designated SEQ ID:19981, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51203] Another function of GAM7553 is therefore inhibition of Phosphatidylinositol 4-kinase, catalytic, beta polypeptide (PIK4CB, Accession NP_002642.1), a gene which phosphorylates the 4- OH position of phosphatidyl inositol. Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PIK4CB.

[51204] The function of PIK4CB and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM139.1. Phospholipid scramblase 2 (PLSCR2, Accession NP_065092.1) is another GAM7553 target gene, herein designated TARGET GENE. PLSCR2 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by PLSCR2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PLSCR2 BINDING SITE, designated SEQ ID:12505, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA,

also designated SEQ ID:354.

[51205] Another function of GAM7553 is therefore inhibition of Phospholipid scramblase 2 (PLSCR2, Accession NP_065092.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PLSCR2.

[51206] PRO2730 (Accession NP_079498.1) is another GAM7553 target gene, herein designated TARGET GENE. PRO2730 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PRO2730, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PRO2730 BINDING SITE, designated SEQ ID:10196, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51207] Another function of GAM7553 is therefore inhibition of PRO2730 (Accession NP_079498.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PRO2730.

[51208] Prp4 pre-mrna processing factor 4 homolog b (yeast) (PRPF4B, Accession NP_003904.2) is another GAM7553

target gene, herein designated TARGET GENE. PRPF4B BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PRPF4B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PRPF4B BINDING SITE, designated SEQ ID:7882, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51209] Another function of GAM7553 is therefore inhibition of Prp4 pre-mrna processing factor 4 homolog b (yeast) (PRPF4B, Accession NP_003904.2) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PRPF4B.

[51210] Regulator of g-protein signalling 18 (RGS18, Accession NP_570138.1) is another GAM7553 target gene, herein designated TARGET GENE. RGS18 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RGS18, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RGS18 BINDING SITE, designated

SEQ ID:19908, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51211] Another function of GAM7553 is therefore inhibition of Regulator of g-protein signalling 18 (RGS18, Accession NP_570138.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RGS18.

[51212] RP4-622L5 (Accession NP_061991.2) is another GAM7553 target gene, herein designated TARGET GENE. RP4-622L5 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RP4-622L5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RP4-622L5 BINDING SITE, designated SEQ ID:12523, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51213] Another function of GAM7553 is therefore inhibition of RP4-622L5 (Accession NP_061991.2) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RP4-622L5.

[51214] Splicing factor 3a, subunit 3, 60kda (SF3A3, Accession NP_006793.1) is another GAM7553 target gene, herein designated TARGET GENE. SF3A3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SF3A3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SF3A3 BINDING SITE, designated SEQ ID:9859, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51215] Another function of GAM7553 is therefore inhibition of Splicing factor 3a, subunit 3, 60kda (SF3A3, Accession NP_006793.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SF3A3.

[51216] Solute carrier family 21 (organic anion transporter), member 6 (SLC21A6, Accession NP_006437.2) is another GAM7553 target gene, herein designated TARGET GENE. SLC21A6 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by SLC21A6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4

illustrates the complementarity of the nucleotide sequences of SLC21A6 BINDING SITE, designated SEQ ID:10610, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51217] Another function of GAM7553 is therefore inhibition of Solute carrier family 21 (organic anion transporter), member 6 (SLC21A6, Accession NP_006437.2) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SLC21A6.

[51218] SLC35E2 (Accession XP_049733.6) is another GAM7553 target gene, herein designated TARGET GENE. SLC35E2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SLC35E2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC35E2 BINDING SITE, designated SEQ ID:617, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51219] Another function of GAM7553 is therefore inhibition of SLC35E2 (Accession XP_049733.6) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment

of diseases and clinical conditions associated with SLC35E2.

[51220] Signal transducing adaptor molecule (sh3 domain and itam motif) 1 (STAM, Accession NP_003464.1) is another GAM7553 target gene, herein designated TARGET GENE. STAM BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by STAM, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of STAM BINDING SITE, designated SEQ ID:12483, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51221] Another function of GAM7553 is therefore inhibition of Signal transducing adaptor molecule (sh3 domain and itam motif) 1 (STAM, Accession NP_003464.1), a gene which is as an adaptor molecule involved in the downstream signaling of cytokine receptors. Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with STAM.

[51222] The function of STAM and its association with various diseases and clinical conditions, has been established by

previous studies, as described hereinabove with reference to GAM106.2. Tumor-associated calcium signal transducer 2 (TACSTD2, Accession NP_002344.1) is another GAM7553 target gene, herein designated TARGET GENE. TACSTD2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TACSTD2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TACSTD2 BINDING SITE, designated SEQ ID:2226, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51223] Another function of GAM7553 is therefore inhibition of Tumor-associated calcium signal transducer 2 (TACSTD2, Accession NP_002344.1), a gene which belongs to ga733 tumor-associated antigen gene family and may function as growth factor receptors. Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TACSTD2.

[51224] The function of TACSTD2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM952.1.Transcobalamin ii; macrocytic anemia (TCN2, Accession NP_000346.2) is another GAM7553 target gene, herein designated TARGET GENE. TCN2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TCN2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TCN2 BINDING SITE, designated SEQ ID:2859, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51225] Another function of GAM7553 is therefore inhibition of Transcobalamin ii; macrocytic anemia (TCN2, Accession NP_000346.2) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TCN2.

[51226] Teratocarcinoma-derived growth factor 1 (TDGF1, Accession NP_003203.1) is another GAM7553 target gene, herein designated TARGET GENE. TDGF1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TDGF1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the comple-

mentarity of the nucleotide sequences of TDGF1 BINDING SITE, designated SEQ ID:2899, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51227] Another function of GAM7553 is therefore inhibition of Teratocarcinoma-derived growth factor 1 (TDGF1, Accession NP_003203.1), a gene which can play a role in the determination of the epiblastic cells that subsequently give rise to the mesoderm. and therefore may be associated with Forebrain defects. Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of Forebrain defects, and of other diseases and clinical conditions associated with TDGF1.

[51228] The function of TDGF1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1.Tudor domain containing 1 (TDRD1, Accession NP_112568.1) is another GAM7553 target gene, herein designated TARGET GENE. TDRD1 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by TDRD1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the comple-

mentarity of the nucleotide sequences of TDRD1 BINDING SITE, designated SEQ ID:18304, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51229] Another function of GAM7553 is therefore inhibition of Tudor domain containing 1 (TDRD1, Accession NP_112568.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TDRD1.

[51230] Tumor necrosis factor (ligand) superfamily, member 8 (TNFSF8, Accession NP_001235.1) is another GAM7553 target gene, herein designated TARGET GENE. TNFSF8 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TNFSF8, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TNFSF8 BINDING SITE, designated SEQ ID:2875, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51231] Another function of GAM7553 is therefore inhibition of Tumor necrosis factor (ligand) superfamily, member 8 (TNFSF8, Accession NP_001235.1), a gene which cytokine

that binds to tnfrsf8/cd30. induces proliferation of t cells. Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TNFSF8.

[51232] The function of TNFSF8 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM487.1. Tnf receptor-associated factor 6 (TRAF6, Accession NP_665802.1) is another GAM7553 target gene, herein designated TARGET GENE. TRAF6 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by TRAF6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TRAF6 BINDING SITE, designated SEQ ID:13703, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51233] Another function of GAM7553 is therefore inhibition of Tnf receptor-associated factor 6 (TRAF6, Accession NP_665802.1). Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TRAF6.

[51234] Tnf receptor-associated factor 6 (TRAF6, Accession NP_004611.1) is another GAM7553 target gene, herein designated TARGET GENE. TRAF6 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by TRAF6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TRAF6 BINDING SITE, designated SEQ ID:13703, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51235] Another function of GAM7553 is therefore inhibition of Tnf receptor-associated factor 6 (TRAF6, Accession NP_004611.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TRAF6.

[51236] Ubiquitination factor e4a (ufd2 homolog, yeast) (UBE4A, Accession NP_004779.1) is another GAM7553 target gene, herein designated TARGET GENE. UBE4A BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by UBE4A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementar-

ity of the nucleotide sequences of UBE4A BINDING SITE, designated SEQ ID:1390, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51237] Another function of GAM7553 is therefore inhibition of Ubiquitination factor e4a (ufd2 homolog, yeast) (UBE4A, Accession NP_004779.1), a gene which binds to the ubiquitin moieties of preformed conjugates and catalyzes ubiquitin chain assembly in conjunction with E1, E2, and E3. Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with UBE4A.

[51238] The function of UBE4A and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM139.2.X123 (Accession NP_004807.1) is another GAM7553 target gene, herein designated TARGET GENE. X123 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by X123, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of X123 BINDING SITE, designated SEQ ID:17404, to the nu-

cleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51239] Another function of GAM7553 is therefore inhibition of X123 (Accession NP_004807.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with X123.

[51240] Zinc finger protein 24 (kox 17) (ZNF24, Accession NP_008896.1) is another GAM7553 target gene, herein designated TARGET GENE. ZNF24 BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by ZNF24, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF24 BINDING SITE, designated SEQ ID:19115, to the nucleotide sequence of GAM7553 RNA, herein designated GAM RNA, also designated SEQ ID:354.

[51241] Another function of GAM7553 is therefore inhibition of Zinc finger protein 24 (kox 17) (ZNF24, Accession NP_008896.1) . Accordingly, utilities of GAM7553 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF24.

[51242]

[51243] Fig. 8 further provides a conceptual description of a novel bioinformatically detected of the present invention, referred to here as Genomic Address Messenger 7776 (GAM7776), which modulates expression of respective target genes thereof, the function and utility of which target genes is known in the art.

[51244] GAM7776 is a novel bioinformatically detected regulatory, non protein coding, micro RNA (miRNA) gene. The method by which GAM7776 was detected is described hereinabove with reference to Figs. 8–15.

[51245] GAM7776 gene, herein designated GAM GENE, and GAM7776 target gene, herein designated TARGET GENE, are human genes contained in the human genome.

[51246] GAM7776 gene encodes a GAM7776 precursor RNA, herein designated GAM PRECURSOR RNA. Similar to other miRNA genes, and unlike most ordinary genes, GAM7776 precursor RNA does not encode a protein. A nucleotide sequence identical or highly similar to the nucleotide sequence of GAM7776 precursor RNA is designated SEQ ID:110, and is provided hereinbelow with reference to the sequence listing part.

[51247] GAM7776 precursor RNA folds onto itself, forming GAM7776 folded precursor RNA, herein designated GAM

FOLDED PRECURSOR RNA, which has a two-dimensional
`hairpin structure`. As is well known in the art, this
`hairpin structure`, is typical of RNA encoded by miRNA
genes, and is due to the fact that the nucleotide sequence
of the first half of the RNA encoded by a miRNA gene is an
accurate or partial inversed-reversed sequence of the nu-
cleotide sequence of the second half thereof.

[51248] GAM7776 precursor RNA folds onto itself, forming
GAM7776 folded precursor RNA, herein designated GAM
FOLDED PRECURSOR RNA, which has a two-dimensional
`hairpin structure`. As is well known in the art, this
`hairpin structure`, is typical of RNA encoded by miRNA
genes, and is due to the fact that the nucleotide sequence
of the first half of the RNA encoded by a miRNA gene is an
accurate or partial reverse-complementary sequence of
the nucleotide sequence of the second half thereof.

[51249] Nucleotide sequence of GAM7776 precursor RNA, desig-
nated SEQ-ID: 110, and a schematic representation of a
predicted secondary folding of GAM7776 folded precursor
RNA are further described with reference to Table 2,
hereby incorporated by reference.

[51250] An enzyme complex designated DICER COMPLEX, `dices`
the GAM7776 folded precursor RNA into GAM7776 RNA,

herein designated GAM RNA, a single stranded ~22 nt long RNA segment. As is known in the art, `dicing` of a hairpin structured RNA precursor product into a short ~22nt RNA segment is catalyzed by an enzyme complex comprising an enzyme called Dicer together with other necessary proteins. A probable (GAM Prediction Accuracy Group: C) nucleotide sequence of GAM7776 RNA is designated SEQ ID:246, and is provided hereinbelow with references to the sequence listing part and Table 3, hereby incorporated by reference.

[51251] GAM7776 target gene, herein designated TARGET GENE, encodes a corresponding messenger RNA, GAM7776 target RNA, herein designated GAM TARGET RNA. GAM7776 target RNA comprises three regions, as is typical of mRNA of a protein coding gene: a 5` untranslated region, a protein coding region and a 3` untranslated region, designated 5`UTR, PROTEIN CODING and 3`UTR respectively.

[51252] GAM7776 RNA, herein designated GAM RNA, binds complementarily to one or more target binding sites located in untranslated regions of GAM7776 target RNA, herein designated GAM TARGET RNA. This complementary binding is due to the fact that the nucleotide sequence of GAM7776 RNA is an accurate or a partial inversed-reversed se-

quence of the nucleotide sequence of each of the target binding sites. As an illustration, Fig. 8 shows three such target binding sites, designated BINDING SITE I, BINDING SITE II and BINDING SITE III respectively. It is appreciated that the number of target binding sites shown in Fig. 8 is meant as an illustration only, and is not meant to be limiting. GAM7776 RNA may have a different number of target binding sites in untranslated regions of a GAM7776 target RNA. It is further appreciated that while Fig. 8 depicts target binding sites in the 3'UTR region, this is meant as an example only these target binding sites may be located in the 3'UTR region, the 5'UTR region, or in both 3'UTR and 5'UTR regions.

[51253] The complementary binding of GAM7776 RNA, herein designated GAM RNA, to target binding sites on GAM7776 target RNA, herein designated GAM TARGET RNA, such as BINDING SITE I, BINDING SITE II and BINDING SITE III, inhibits translation of GAM7776 target RNA into GAM7776 target protein, herein designated GAM TARGET PROTEIN. GAM target protein is therefore outlined by a broken line.

[51254] It is appreciated that GAM7776 target gene, herein designated TARGET GENE, in fact represents a plurality of GAM7776 target genes. The mRNA of each one of this

plurality of GAM7776 target genes comprises one or more target binding sites, each having a nucleotide sequence which is at least partly complementary to GAM7776 RNA, herein designated GAM RNA, and which when bound by GAM7776 RNA causes inhibition of translation of respective one or more GAM7776 target proteins.

[51255] It is further appreciated by one skilled in the art that the mode of translational inhibition illustrated by Fig. 8 with specific reference to translational inhibition exerted by GAM7776 gene, herein designated GAM GENE, on one or more GAM7776 target genes, herein collectively designated TARGET GENE, is common to other known miRNA genes. As mentioned hereinabove with reference to the background section, although a specific complementary binding site has been demonstrated only for some of the known miRNA genes (primarily Lin-4 and Let-7), all other recently discovered miRNA genes are also believed by those skilled in the art to modulate expression of other genes by complementary binding, although specific complementary binding sites of these other miRNA genes have not yet been found (Ruvkun G., Perspective: Glimpses of a tiny RNA world, Science 294,779 (2001)).

[51256] It is appreciated that specific functions and accordingly

utilities of GAM7776 correlate with, and may be deduced from, the identity of the target genes which GAM7776 binds and inhibits, and the function of these target genes, as elaborated hereinbelow.

[51257]

[51258]

[51259] 15E1.2 (Accession XP_290596.1) is a GAM7776 target gene, herein designated TARGET GENE. 15E1.2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by 15E1.2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of 15E1.2 BINDING SITE, designated SEQ ID:12868, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51260] A function of GAM7776 is therefore inhibition of 15E1.2 (Accession XP_290596.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with 15E1.2.

[51261] Alpha-1-b glycoprotein (A1BG, Accession NP_570602.2) is another GAM7776 target gene, herein designated TAR-

GET GENE. A1BG BINDING SITE1 and A1BG BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by A1BG, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of A1BG BINDING SITE1 and A1BG BINDING SITE2, designated SEQ ID:18868 and SEQ ID:2534 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51262] Another function of GAM7776 is therefore inhibition of Alpha-1-b glycoprotein (A1BG, Accession NP_570602.2), a gene which a plasma protein of unknown function. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with A1BG.

[51263] The function of A1BG and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM130.1.Aminoadipate-semialdehyde synthase (AASS, Accession NP_005754.2) is another GAM7776 target gene, herein designated TARGET GENE. AASS BINDING SITE is a target binding site found in the 3' untranslated

region of mRNA encoded by AASS, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of AASS BINDING SITE, designated SEQ ID:6339, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51264] Another function of GAM7776 is therefore inhibition of Aminoadipate-semialdehyde synthase (AASS, Accession NP_005754.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with AASS.

[51265] ABCA13 (Accession NP_689914.2) is another GAM7776 target gene, herein designated TARGET GENE. ABCA13 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ABCA13, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ABCA13 BINDING SITE, designated SEQ ID:7385, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51266] Another function of GAM7776 is therefore inhibition of

ABCA13 (Accession NP_689914.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ABCA13.

[51267] Atp-binding cassette, sub-family c (cftr/mrp), member 11 (ABCC11, Accession NP_149163.2) is another GAM7776 target gene, herein designated TARGET GENE. ABCC11 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by ABCC11, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ABCC11 BINDING SITE, designated SEQ ID:7022, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51268] Another function of GAM7776 is therefore inhibition of Atp-binding cassette, sub-family c (cftr/mrp), member 11 (ABCC11, Accession NP_149163.2), a gene which acts as a multispecific organic anion pump which can transport nucleotide analogs (by similarity). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ABCC11.

[51269] The function of ABCC11 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1.Atp-binding cassette, sub-family d (ald), member 3 (ABCD3, Accession NP_002849.1) is another GAM7776 target gene, herein designated TARGET GENE. ABCD3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ABCD3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ABCD3 BINDING SITE, designated SEQ ID:14444, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51270] Another function of GAM7776 is therefore inhibition of Atp-binding cassette, sub-family d (ald), member 3 (ABCD3, Accession NP_002849.1), a gene which a probable transporter. and therefore is associated with Zellweger syndrome- 2 (zws- 2). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Zellweger syndrome- 2 (zws- 2)., and of other diseases and clinical conditions associated with ABCD3.

[51271] The function of ABCD3 and its association with various

diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1. Acyl-coenzyme A dehydrogenase, short/branched chain (ACADSB, Accession NP_001600.1) is another GAM7776 target gene, herein designated TARGET GENE. ACADSB BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ACADSB, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ACADSB BINDING SITE, designated SEQ ID:16689, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51272] Another function of GAM7776 is therefore inhibition of Acyl-coenzyme A dehydrogenase, short/branched chain (ACADSB, Accession NP_001600.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ACADSB.

[51273] Acid phosphatase 5, tartrate resistant (ACP5, Accession NP_001602.1) is another GAM7776 target gene, herein designated TARGET GENE. ACP5 BINDING SITE is a target

binding site found in the 3' untranslated region of mRNA encoded by ACP5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ACP5 BINDING SITE, designated SEQ ID:6638, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51274] Another function of GAM7776 is therefore inhibition of Acid phosphatase 5, tartrate resistant (ACP5, Accession NP_001602.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ACP5.

[51275] A disintegrin-like and metalloprotease (reprolysin type) with thrombospondin type 1 motif, 4 (ADAMTS4, Accession NP_005090.1) is another GAM7776 target gene, herein designated TARGET GENE. ADAMTS4 BINDING SITE1 and ADAMTS4 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by ADAMTS4, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ADAMTS4 BINDING SITE1 and

ADAMTS4 BINDING SITE2, designated SEQ ID:1651 and SEQ ID:13757 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51276] Another function of GAM7776 is therefore inhibition of A disintegrin-like and metalloprotease (reprolysin type) with thrombospondin type 1 motif, 4 (ADAMTS4, Accession NP_005090.1), a gene which cleaves aggrecan, a cartilage proteoglycan, and may be involved in its turnover. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ADAMTS4.

[51277] The function of ADAMTS4 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1. Adenylate cyclase 6 (ADCY6, Accession NP_066193.1) is another GAM7776 target gene, herein designated TARGET GENE. ADCY6 BINDING SITE1 and ADCY6 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by ADCY6, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the

nucleotide sequences of ADCY6 BINDING SITE1 and ADCY6 BINDING SITE2, designated SEQ ID:15161 and SEQ ID:15161 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51278] Another function of GAM7776 is therefore inhibition of Adenylate cyclase 6 (ADCY6, Accession NP_066193.1), a gene which this a membrane- bound, Ca^{2+} - inhibitable adenylyl cyclase (by similarity). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ADCY6.

[51279] The function of ADCY6 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM67.2. Adenylate cyclase 6 (ADCY6, Accession NP_056085.1) is another GAM7776 target gene, herein designated TARGET GENE. ADCY6 BINDING SITE1 and ADCY6 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by ADCY6, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ADCY6 BINDING SITE1 and

ADCY6 BINDING SITE2, designated SEQ ID:16688 and SEQ ID:19456 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51280] Another function of GAM7776 is therefore inhibition of Adenylate cyclase 6 (ADCY6, Accession NP_056085.1), a gene which this a membrane- bound, Ca^{2+} - inhibitable adenylyl cyclase (by similarity). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ADCY6.

[51281] The function of ADCY6 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM67.2. Agmatine ureohydrolase (agmatinase) (AGMAT, Accession NP_079034.2) is another GAM7776 target gene, herein designated TARGET GENE. AGMAT BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by AGMAT, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of AGMAT BINDING SITE, designated SEQ ID:9193, to the nucleotide sequence of GAM7776 RNA, herein designated

GAM RNA, also designated SEQ ID:246.

[51282] Another function of GAM7776 is therefore inhibition of Agmatine ureohydrolase (agmatinase) (AGMAT, Accession NP_079034.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with AGMAT.

[51283] Aryl hydrocarbon receptor (AHR, Accession NP_001612.1) is another GAM7776 target gene, herein designated TARGET GENE. AHR BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by AHR, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of AHR BINDING SITE, designated SEQ ID:8217, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51284] Another function of GAM7776 is therefore inhibition of Aryl hydrocarbon receptor (AHR, Accession NP_001612.1), a gene which plays a role in modulating carcinogenesis through the induction of xenobiotic- metabolizing enzymes and therefore may be associated with Stomach tumors. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Stomach tumors, and of

other diseases and clinical conditions associated with AHR.

[51285] The function of AHR and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1. Absent in melanoma 1 (AIM1, Accession XP_166300.1) is another GAM7776 target gene, herein designated TARGET GENE. AIM1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by AIM1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of AIM1 BINDING SITE, designated SEQ ID:16864, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51286] Another function of GAM7776 is therefore inhibition of Absent in melanoma 1 (AIM1, Accession XP_166300.1), a gene which is altered in association with tumor suppression in a model of human melanoma and therefore may be associated with Malignant melanoma. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Malignant melanoma, and of other diseases and clinical

conditions associated with AIM1.

[51287] The function of AIM1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM136.1. Aldo-keto reductase family 1, member d1 (delta 4-3-ketosteroid-5-beta-reductase) (AKR1D1, Accession NP_005980.1) is another GAM7776 target gene, herein designated TARGET GENE. AKR1D1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by AKR1D1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of AKR1D1 BINDING SITE, designated SEQ ID:8063, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51288] Another function of GAM7776 is therefore inhibition of Aldo-keto reductase family 1, member d1 (delta 4-3-ketosteroid-5-beta-reductase) (AKR1D1, Accession NP_005980.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with AKR1D1.

[51289] Aldehyde dehydrogenase 1 family, member b1 (ALDH1B1,

Accession NP_000683.3) is another GAM7776 target gene, herein designated TARGET GENE. ALDH1B1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ALDH1B1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ALDH1B1 BINDING SITE, designated SEQ ID:2153, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51290] Another function of GAM7776 is therefore inhibition of Aldehyde dehydrogenase 1 family, member b1 (ALDH1B1, Accession NP_000683.3) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ALDH1B1.

[51291] Arachidonate 15-lipoxygenase (ALOX15, Accession NP_001131.1) is another GAM7776 target gene, herein designated TARGET GENE. ALOX15 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ALOX15, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ALOX15 BINDING

SITE, designated SEQ ID:19939, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51292] Another function of GAM7776 is therefore inhibition of Arachidonate 15-lipoxygenase (ALOX15, Accession NP_001131.1), a gene which converts arachidonic acid to 15s- hydroperoxyeicosatetraenoic acid. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ALOX15.

[51293] The function of ALOX15 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1.AMID (Accession NP_116186.1) is another GAM7776 target gene, herein designated TARGET GENE. AMID BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by AMID, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of AMID BINDING SITE, designated SEQ ID:5895, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51294] Another function of GAM7776 is therefore inhibition of AMID (Accession NP_116186.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with AMID.

[51295] Ankyrin repeat domain 6 (ANKRD6, Accession NP_055757.1) is another GAM7776 target gene, herein designated TARGET GENE. ANKRD6 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ANKRD6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ANKRD6 BINDING SITE, designated SEQ ID:1746, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51296] Another function of GAM7776 is therefore inhibition of Ankyrin repeat domain 6 (ANKRD6, Accession NP_055757.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ANKRD6.

[51297] Adaptor-related protein complex 3, sigma 2 subunit (AP3S2, Accession NP_005820.1) is another GAM7776 target gene, herein designated TARGET GENE. AP3S2 BIND-

ING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by AP3S2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of AP3S2 BINDING SITE, designated SEQ ID:19874, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51298] Another function of GAM7776 is therefore inhibition of Adaptor-related protein complex 3, sigma 2 subunit (AP3S2, Accession NP_005820.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with AP3S2.

[51299] Apoptotic protease activating factor (APAF1, Accession NP_037361.1) is another GAM7776 target gene, herein designated TARGET GENE. APAF1 BINDING SITE1 and APAF1 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by APAF1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of APAF1 BINDING SITE1 and APAF1 BINDING SITE2, designated SEQ ID:19360 and SEQ

ID:16578 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51300] Another function of GAM7776 is therefore inhibition of Apoptotic protease activating factor (APAF1, Accession NP_037361.1), a gene which functions in the mitochondrial apoptotic pathway that leads to caspase 9 dependent activation of caspase 3 and therefore may be associated with Cancer. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Cancer, and of other diseases and clinical conditions associated with APAF1.

[51301] The function of APAF1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1. Apoptotic protease activating factor (APAF1, Accession NP_001151.1) is another GAM7776 target gene, herein designated TARGET GENE. APAF1 BINDING SITE1 and APAF1 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by APAF1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of APAF1 BINDING SITE1 and APAF1

BINDING SITE2, designated SEQ ID:16578 and SEQ ID:19360 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51302] Another function of GAM7776 is therefore inhibition of Apoptotic protease activating factor (APAF1, Accession NP_001151.1), a gene which functions in the mitochondrial apoptotic pathway that leads to caspase 9 dependent activation of caspase 3 and therefore may be associated with Cancer. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Cancer, and of other diseases and clinical conditions associated with APAF1.

[51303] The function of APAF1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1.APM1 (Accession NP_004788.1) is another GAM7776 target gene, herein designated TARGET GENE. APM1 BINDING SITE1 and APM1 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by APM1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of APM1 BINDING SITE1 and APM1

BINDING SITE2, designated SEQ ID:5598 and SEQ ID:20035 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51304] Another function of GAM7776 is therefore inhibition of APM1 (Accession NP_004788.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with APM1.

[51305] Apolipoprotein b mrna editing enzyme, catalytic polypeptide-like 3f (APOBEC3F, Accession NP_660341.2) is another GAM7776 target gene, herein designated TARGET GENE. APOBEC3F BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by APOBEC3F, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of APOBEC3F BINDING SITE, designated SEQ ID:5622, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51306] Another function of GAM7776 is therefore inhibition of Apolipoprotein b mrna editing enzyme, catalytic polypeptide-like 3f (APOBEC3F, Accession NP_660341.2) . Ac-

cordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with APOBEC3F.

[51307] Apolipoprotein I, 1 (APOL1, Accession NP_663318.1) is another GAM7776 target gene, herein designated TARGET GENE. APOL1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by APOL1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of APOL1 BINDING SITE, designated SEQ ID:9574, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51308] Another function of GAM7776 is therefore inhibition of Apolipoprotein I, 1 (APOL1, Accession NP_663318.1), a gene which may participate in reverse cholesterol transport from peripheral cells to the liver. and therefore may be associated with Schizophrenia. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Schizophrenia, and of other diseases and clinical conditions associated with APOL1.

[51309] The function of APOL1 and its association with various

diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1. Apolipoprotein I, 1 (APOL1, Accession NP_003652.2) is another GAM7776 target gene, herein designated TARGET GENE. APOL1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by APOL1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of APOL1 BINDING SITE, designated SEQ ID:9574, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51310] Another function of GAM7776 is therefore inhibition of Apolipoprotein I, 1 (APOL1, Accession NP_003652.2), a gene which may participate in reverse cholesterol transport from peripheral cells to the liver. and therefore may be associated with Schizophrenia. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Schizophrenia, and of other diseases and clinical conditions associated with APOL1.

[51311] The function of APOL1 and its association with various diseases and clinical conditions, has been established by

previous studies, as described hereinabove with reference to GAM30.1. Apolipoprotein I, 2 (APOL2, Accession NP_663612.1) is another GAM7776 target gene, herein designated TARGET GENE. APOL2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by APOL2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of APOL2 BINDING SITE, designated SEQ ID:8064, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51312] Another function of GAM7776 is therefore inhibition of Apolipoprotein I, 2 (APOL2, Accession NP_663612.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with APOL2.

[51313] Apolipoprotein I, 2 (APOL2, Accession NP_112092.1) is another GAM7776 target gene, herein designated TARGET GENE. APOL2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by APOL2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BIND-

ING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of APOL2 BINDING SITE, designated SEQ ID:8064, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51314] Another function of GAM7776 is therefore inhibition of Apolipoprotein I, 2 (APOL2, Accession NP_112092.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with APOL2.

[51315] Amyloid beta precursor protein (cytoplasmic tail) binding protein 2 (APPBP2, Accession NP_006371.2) is another GAM7776 target gene, herein designated TARGET GENE. APPBP2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by APPBP2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of APPBP2 BINDING SITE, designated SEQ ID:4095, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51316] Another function of GAM7776 is therefore inhibition of Amyloid beta precursor protein (cytoplasmic tail) binding

protein 2 (APPBP2, Accession NP_006371.2), a gene which interacts with the basolateral sorting signal of amyloid precursor protein. and therefore may be associated with Alzheimer's disease. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Alzheimer's disease, and of other diseases and clinical conditions associated with APPBP2.

[51317] The function of APPBP2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM130.1.APPL (Accession NP_036228.1) is another GAM7776 target gene, herein designated TARGET GENE. APPL BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by APPL, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of APPL BINDING SITE, designated SEQ ID:12068, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51318] Another function of GAM7776 is therefore inhibition of APPL (Accession NP_036228.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of

diseases and clinical conditions associated with APPL.

[51319] Aquaporin 2 (collecting duct) (AQP2, Accession NP_000477.1) is another GAM7776 target gene, herein designated TARGET GENE. AQP2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by AQP2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of AQP2 BINDING SITE, designated SEQ ID:18318, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51320] Another function of GAM7776 is therefore inhibition of Aquaporin 2 (collecting duct) (AQP2, Accession NP_000477.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with AQP2.

[51321] Aquaporin 6, kidney specific (AQP6, Accession NP_445738.1) is another GAM7776 target gene, herein designated TARGET GENE. AQP6 BINDING SITE1 through AQP6 BINDING SITE3 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by AQP6, corresponding to target binding sites

such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of AQP6 BINDING SITE1 through AQP6 BINDING SITE3, designated SEQ ID:3169, SEQ ID:3169 and SEQ ID:7869 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51322] Another function of GAM7776 is therefore inhibition of Aquaporin 6, kidney specific (AQP6, Accession NP_445738.1), a gene which participates in distinct physiologic function such as glomerular filtration, tubular endocytosis, and acid– base metabolism. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with AQP6.

[51323] The function of AQP6 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM51.1. Aquaporin 6, kidney specific (AQP6, Accession NP_001643.1) is another GAM7776 target gene, herein designated TARGET GENE. AQP6 BINDING SITE1 through AQP6 BINDING SITE3 are target binding sites found in untranslated regions of multiple transcripts of

mRNA encoded by AQP6, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of AQP6 BINDING SITE1 through AQP6 BINDING SITE3, designated SEQ ID:8069, SEQ ID:13747 and SEQ ID:6901 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51324] Another function of GAM7776 is therefore inhibition of Aquaporin 6, kidney specific (AQP6, Accession NP_001643.1), a gene which participates in distinct physiologic function such as glomerular filtration, tubular endocytosis, and acid– base metabolism. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with AQP6.

[51325] The function of AQP6 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM51.1. Rho gtpase activating protein 1 (ARHGAP1, Accession NP_004299.1) is another GAM7776 target gene, herein designated TARGET GENE. ARHGAP1 BINDING SITE is a target binding site found in the 3` untranslated re-

gion of mRNA encoded by ARHGAP1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ARHGAP1 BINDING SITE, designated SEQ ID:4096, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51326] Another function of GAM7776 is therefore inhibition of Rho gtpase activating protein 1 (ARHGAP1, Accession NP_004299.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ARHGAP1.

[51327] ARHGAP11A (Accession NP_055598.1) is another GAM7776 target gene, herein designated TARGET GENE. ARHGAP11A BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by ARHGAP11A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ARHGAP11A BINDING SITE, designated SEQ ID:17742, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51328] Another function of GAM7776 is therefore inhibition of ARHGAP11A (Accession NP_055598.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ARHGAP11A.

[51329] ARK5 (Accession NP_055655.1) is another GAM7776 target gene, herein designated TARGET GENE. ARK5 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ARK5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ARK5 BINDING SITE, designated SEQ ID:17859, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51330] Another function of GAM7776 is therefore inhibition of ARK5 (Accession NP_055655.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ARK5.

[51331] ARPP-19 (Accession NP_006619.1) is another GAM7776 target gene, herein designated TARGET GENE. ARPP-19 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ARPP-19, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ARPP-19 BINDING SITE, designated SEQ ID:944, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51332] Another function of GAM7776 is therefore inhibition of ARPP-19 (Accession NP_006619.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ARPP-19.

[51333] Ankyrin repeat and socs box-containing 16 (ASB16, Accession NP_543139.4) is another GAM7776 target gene, herein designated TARGET GENE. ASB16 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ASB16, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ASB16 BINDING SITE, designated SEQ ID:14722, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51334] Another function of GAM7776 is therefore inhibition of

Ankyrin repeat and socs box-containing 16 (ASB16, Accession NP_543139.4) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ASB16.

[51335] Ankyrin repeat and socs box-containing 6 (ASB6, Accession NP_060343.1) is another GAM7776 target gene, herein designated TARGET GENE. ASB6 BINDING SITE1 and ASB6 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by ASB6, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ASB6 BINDING SITE1 and ASB6 BINDING SITE2, designated SEQ ID:2196 and SEQ ID:10305 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51336] Another function of GAM7776 is therefore inhibition of Ankyrin repeat and socs box-containing 6 (ASB6, Accession NP_060343.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ASB6.

[51337] Ankyrin repeat and socs box-containing 6 (ASB6, Acces-

sion NP_060343.1) is another GAM7776 target gene, herein designated TARGET GENE. ASB6 BINDING SITE1 and ASB6 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by ASB6, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ASB6 BINDING SITE1 and ASB6 BINDING SITE2, designated SEQ ID:10305 and SEQ ID:2196 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51338] Another function of GAM7776 is therefore inhibition of Ankyrin repeat and socs box-containing 6 (ASB6, Accession NP_060343.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ASB6.

[51339] ASE-1 (Accession NP_036231.1) is another GAM7776 target gene, herein designated TARGET GENE. ASE-1 BINDING SITE1 and ASE-1 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by ASE-1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ASE-1 BINDING SITE1 and ASE-1 BINDING SITE2, designated SEQ ID:3101 and SEQ ID:1741 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51340] Another function of GAM7776 is therefore inhibition of ASE-1 (Accession NP_036231.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ASE-1.

[51341] ATF7IP2 (Accession NP_079273.1) is another GAM7776 target gene, herein designated TARGET GENE. ATF7IP2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ATF7IP2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ATF7IP2 BINDING SITE, designated SEQ ID:9602, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51342] Another function of GAM7776 is therefore inhibition of ATF7IP2 (Accession NP_079273.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment

of diseases and clinical conditions associated with ATF7IP2.

[51343] Ataxia telangiectasia mutated (includes complementation groups a, c and d) (ATM, Accession NP_612150.1) is another GAM7776 target gene, herein designated TARGET GENE. ATM BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by ATM, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ATM BINDING SITE, designated SEQ ID:1837, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51344] Another function of GAM7776 is therefore inhibition of Ataxia telangiectasia mutated (includes complementation groups a, c and d) (ATM, Accession NP_612150.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ATM.

[51345] Atpase, na⁺/k⁺ transporting, beta 2 polypeptide (ATP1B2, Accession NP_001669.1) is another GAM7776 target gene, herein designated TARGET GENE. ATP1B2

BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ATP1B2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ATP1B2 BINDING SITE, designated SEQ ID:16916, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51346] Another function of GAM7776 is therefore inhibition of Atpase, Na^+/K^+ transporting, beta 2 polypeptide (ATP1B2, Accession NP_001669.1), a gene which catalyzes the hydrolysis of ATP coupled with the exchange of Na^+/K^+ ions across the plasma membrane. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ATP1B2.

[51347] The function of ATP1B2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM130.1. Atpase, $(\text{Na}^+)/\text{K}^+$ transporting, beta 4 polypeptide (ATP1B4, Accession NP_036201.1) is another GAM7776 target gene, herein designated TARGET GENE. ATP1B4 BINDING SITE is a target binding site found in the

3' untranslated region of mRNA encoded by ATP1B4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ATP1B4 BINDING SITE, designated SEQ ID:13042, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51348] Another function of GAM7776 is therefore inhibition of Atpase, (na+)/k+ transporting, beta 4 polypeptide (ATP1B4, Accession NP_036201.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ATP1B4.

[51349] Atpase, h+ transporting, lysosomal 38kda, v0 subunit d isoform 2 (ATP6V0D2, Accession NP_689778.1) is another GAM7776 target gene, herein designated TARGET GENE. ATP6V0D2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ATP6V0D2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ATP6V0D2 BINDING SITE, designated SEQ ID:15039, to the nucleotide sequence of

GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51350] Another function of GAM7776 is therefore inhibition of Atpase, h⁺ transporting, lysosomal 38kda, v0 subunit d isoform 2 (ATP6V0D2, Accession NP_689778.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ATP6V0D2.

[51351] ATP6V1A (Accession NP_001681.2) is another GAM7776 target gene, herein designated TARGET GENE. ATP6V1A BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ATP6V1A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ATP6V1A BINDING SITE, designated SEQ ID:18868, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51352] Another function of GAM7776 is therefore inhibition of ATP6V1A (Accession NP_001681.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ATP6V1A.

[51353] Atpase, cu++ transporting, alpha polypeptide (menkes syndrome) (ATP7A, Accession NP_000043.1) is another GAM7776 target gene, herein designated TARGET GENE. ATP7A BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ATP7A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ATP7A BINDING SITE, designated SEQ ID:4112, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51354] Another function of GAM7776 is therefore inhibition of Atpase, cu++ transporting, alpha polypeptide (menkes syndrome) (ATP7A, Accession NP_000043.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ATP7A.

[51355] Atpase, class i, type 8b, member 2 (ATP8B2, Accession XP_290875.1) is another GAM7776 target gene, herein designated TARGET GENE. ATP8B2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ATP8B2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or

BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ATP8B2 BINDING SITE, designated SEQ ID:8634, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51356] Another function of GAM7776 is therefore inhibition of Atpase, class i, type 8b, member 2 (ATP8B2, Accession XP_290875.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ATP8B2.

[51357] Axl receptor tyrosine kinase (AXL, Accession NP_001690.2) is another GAM7776 target gene, herein designated TARGET GENE. AXL BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by AXL, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of AXL BINDING SITE, designated SEQ ID:11802, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51358] Another function of GAM7776 is therefore inhibition of Axl receptor tyrosine kinase (AXL, Accession

NP_001690.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with AXL.

[51359] Axl receptor tyrosine kinase (AXL, Accession NP_068713.2) is another GAM7776 target gene, herein designated TARGET GENE. AXL BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by AXL, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of AXL BINDING SITE, designated SEQ ID:11802, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51360] Another function of GAM7776 is therefore inhibition of Axl receptor tyrosine kinase (AXL, Accession NP_068713.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with AXL.

[51361] Udp-gal:betaglcnac beta 1,4- galactosyltransferase, polypeptide 4 (B4GALT4, Accession NP_003769.1) is another GAM7776 target gene, herein designated TARGET GENE. B4GALT4 BINDING SITE is a target binding site

found in the 3' untranslated region of mRNA encoded by B4GALT4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of B4GALT4 BINDING SITE, designated SEQ ID:11028, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51362] Another function of GAM7776 is therefore inhibition of Udp-gal:betaglcnac beta 1,4- galactosyltransferase, polypeptide 4 (B4GALT4, Accession NP_003769.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with B4GALT4.

[51363] Xylosylprotein beta 1,4-galactosyltransferase, polypeptide 7 (galactosyltransferase i) (B4GALT7, Accession NP_009186.1) is another GAM7776 target gene, herein designated TARGET GENE. B4GALT7 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by B4GALT7, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of B4GALT7 BIND-

ING SITE, designated SEQ ID:18475, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51364] Another function of GAM7776 is therefore inhibition of Xylosylprotein beta 1,4-galactosyltransferase, polypeptide 7 (galactosyltransferase i) (B4GALT7, Accession NP_009186.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with B4GALT7.

[51365] BA108L7.2 (Accession NP_112233.2) is another GAM7776 target gene, herein designated TARGET GENE. BA108L7.2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by BA108L7.2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BA108L7.2 BINDING SITE, designated SEQ ID:10888, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51366] Another function of GAM7776 is therefore inhibition of BA108L7.2 (Accession NP_112233.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

BA108L7.2.

[51367] Beta-site app-cleaving enzyme 2 (BACE2, Accession NP_620477.1) is another GAM7776 target gene, herein designated TARGET GENE. BACE2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by BACE2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BACE2 BINDING SITE, designated SEQ ID:11052, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51368] Another function of GAM7776 is therefore inhibition of Beta-site app-cleaving enzyme 2 (BACE2, Accession NP_620477.1), a gene which cleaves intracellularly the b-secretase site of amyloid precursor protein and therefore may be associated with Alzheimer's disease and down syndrome. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Alzheimer's disease and down syndrome, and of other diseases and clinical conditions associated with BACE2.

[51369] The function of BACE2 and its association with various diseases and clinical conditions, has been established by

previous studies, as described hereinabove with reference to GAM139.1.Beta-site app-cleaving enzyme 2 (BACE2, Accession NP_036237.2) is another GAM7776 target gene, herein designated TARGET GENE. BACE2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by BACE2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BACE2 BINDING SITE, designated SEQ ID:11052, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51370] Another function of GAM7776 is therefore inhibition of Beta-site app-cleaving enzyme 2 (BACE2, Accession NP_036237.2), a gene which cleaves intracellularly the b-secretase site of amyloid precursor protein and therefore may be associated with Alzheimer's disease and down syndrome. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Alzheimer's disease and down syndrome, and of other diseases and clinical conditions associated with BACE2.

[51371] The function of BACE2 and its association with various diseases and clinical conditions, has been established by

previous studies, as described hereinabove with reference to GAM139.1. Beta-site app-cleaving enzyme 2 (BACE2, Accession NP_620476.1) is another GAM7776 target gene, herein designated TARGET GENE. BACE2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by BACE2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BACE2 BINDING SITE, designated SEQ ID:11052, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51372] Another function of GAM7776 is therefore inhibition of Beta-site app-cleaving enzyme 2 (BACE2, Accession NP_620476.1), a gene which cleaves intracellularly the b-secretase site of amyloid precursor protein and therefore may be associated with Alzheimer's disease and down syndrome. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Alzheimer's disease and down syndrome, and of other diseases and clinical conditions associated with BACE2.

[51373] The function of BACE2 and its association with various diseases and clinical conditions, has been established by

previous studies, as described hereinabove with reference to GAM139.1.Bcl2-associated athanogene 5 (BAG5, Accession NP_004864.1) is another GAM7776 target gene, herein designated TARGET GENE. BAG5 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by BAG5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BAG5 BINDING SITE, designated SEQ ID:5695, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51374] Another function of GAM7776 is therefore inhibition of Bcl2-associated athanogene 5 (BAG5, Accession NP_004864.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BAG5.

[51375] BART1 (Accession NP_036238.1) is another GAM7776 target gene, herein designated TARGET GENE. BART1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by BART1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the

complementarity of the nucleotide sequences of BART1 BINDING SITE, designated SEQ ID:16830, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51376] Another function of GAM7776 is therefore inhibition of BART1 (Accession NP_036238.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BART1.

[51377] Bromodomain adjacent to zinc finger domain, 2a (BAZ2A, Accession NP_038477.1) is another GAM7776 target gene, herein designated TARGET GENE. BAZ2A BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by BAZ2A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BAZ2A BINDING SITE, designated SEQ ID:8852, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51378] Another function of GAM7776 is therefore inhibition of Bromodomain adjacent to zinc finger domain, 2a (BAZ2A, Accession NP_038477.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of

diseases and clinical conditions associated with BAZ2A.

[51379] BCAP31 (Accession NP_005736.2) is another GAM7776 target gene, herein designated TARGET GENE. BCAP31 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by BCAP31, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BCAP31 BINDING SITE, designated SEQ ID:4861, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51380] Another function of GAM7776 is therefore inhibition of BCAP31 (Accession NP_005736.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BCAP31.

[51381] B-cell cll/lymphoma 10 (BCL10, Accession NP_003912.1) is another GAM7776 target gene, herein designated TARGET GENE. BCL10 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by BCL10, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of BCL10 BINDING SITE, designated SEQ ID:19576, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51382] Another function of GAM7776 is therefore inhibition of B-cell cl/lymphoma 10 (BCL10, Accession NP_003912.1), a gene which is a positive regulator of lymphocyte proliferation, NF- kappaB activator. and therefore may be associated with Malt lymphoma, follicular lymphoma. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Malt lymphoma, follicular lymphoma, and of other diseases and clinical conditions associated with BCL10.

[51383] The function of BCL10 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM136.1.B double prime 1, subunit of rna polymerase iii transcription initiation factor iiib (BDP1, Accession NP_060899.1) is another GAM7776 target gene, herein designated TARGET GENE. BDP1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by BDP1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III

of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BDP1 BINDING SITE, designated SEQ ID:19556, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51384] Another function of GAM7776 is therefore inhibition of B double prime 1, subunit of rna polymerase iii transcription initiation factor iiib (BDP1, Accession NP_060899.1), a gene which activates RNA polymerase III transcription. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BDP1.

[51385] The function of BDP1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM146.1.BENE (Accession NP_005425.1) is another GAM7776 target gene, herein designated TARGET GENE. BENE BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by BENE, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BENE BINDING SITE, designated SEQ ID:6009, to the nu-

cleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51386] Another function of GAM7776 is therefore inhibition of BENE (Accession NP_005425.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BENE.

[51387] BHD (Accession NP_659434.2) is another GAM7776 target gene, herein designated TARGET GENE. BHD BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by BHD, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BHD BINDING SITE, designated SEQ ID:9036, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51388] Another function of GAM7776 is therefore inhibition of BHD (Accession NP_659434.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BHD.

[51389] BMF (Accession NP_277038.1) is another GAM7776 target gene, herein designated TARGET GENE. BMF BINDING SITE is a target binding site found in the 3' untranslated re-

gion of mRNA encoded by BMF, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BMF BINDING SITE, designated SEQ ID:759, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51390] Another function of GAM7776 is therefore inhibition of BMF (Accession NP_277038.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BMF.

[51391] BNIP-S (Accession NP_612122.1) is another GAM7776 target gene, herein designated TARGET GENE. BNIP-S BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by BNIP-S, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BNIP-S BINDING SITE, designated SEQ ID:5845, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51392] Another function of GAM7776 is therefore inhibition of

BNIP-S (Accession NP_612122.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BNIP-S.

[51393] BRIP1 (Accession NP_114432.1) is another GAM7776 target gene, herein designated TARGET GENE. BRIP1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by BRIP1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BRIP1 BINDING SITE, designated SEQ ID:13904, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51394] Another function of GAM7776 is therefore inhibition of BRIP1 (Accession NP_114432.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BRIP1.

[51395] Butyrophilin, subfamily 3, member a1 (BTN3A1, Accession NP_008979.2) is another GAM7776 target gene, herein designated TARGET GENE. BTN3A1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by BTN3A1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or

BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BTN3A1 BINDING SITE, designated SEQ ID:2067, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51396] Another function of GAM7776 is therefore inhibition of Butyrophilin, subfamily 3, member a1 (BTN3A1, Accession NP_008979.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BTN3A1.

[51397] BXDC1 (Accession XP_166303.1) is another GAM7776 target gene, herein designated TARGET GENE. BXDC1 BINDING SITE1 and BXDC1 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by BXDC1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BXDC1 BINDING SITE1 and BXDC1 BINDING SITE2, designated SEQ ID:12129 and SEQ ID:4549 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51398] Another function of GAM7776 is therefore inhibition of

BXDC1 (Accession XP_166303.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BXDC1.

[51399] Chromosome 11 open reading frame 17 (C11orf17, Accession NP_065693.2) is another GAM7776 target gene, herein designated TARGET GENE. C11orf17 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C11orf17, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C11orf17 BINDING SITE, designated SEQ ID:11525, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51400] Another function of GAM7776 is therefore inhibition of Chromosome 11 open reading frame 17 (C11orf17, Accession NP_065693.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C11orf17.

[51401] Chromosome 13 open reading frame 1 (C13orf1, Accession NP_065189.1) is another GAM7776 target gene, herein designated TARGET GENE. C13orf1 BINDING SITE is a target binding site found in the 3' untranslated region

of mRNA encoded by C13orf1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C13orf1 BINDING SITE, designated SEQ ID:5746, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51402] Another function of GAM7776 is therefore inhibition of Chromosome 13 open reading frame 1 (C13orf1, Accession NP_065189.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C13orf1.

[51403] Chromosome 14 open reading frame 1 (C14orf1, Accession NP_009107.1) is another GAM7776 target gene, herein designated TARGET GENE. C14orf1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C14orf1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C14orf1 BINDING SITE, designated SEQ ID:12744, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51404] Another function of GAM7776 is therefore inhibition of Chromosome 14 open reading frame 1 (C14orf1, Accession NP_009107.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C14orf1.

[51405] C14orf113 (Accession NP_060100.1) is another GAM7776 target gene, herein designated TARGET GENE. C14orf113 BINDING SITE1 and C14orf113 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by C14orf113, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C14orf113 BINDING SITE1 and C14orf113 BINDING SITE2, designated SEQ ID:18863 and SEQ ID:5052 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51406] Another function of GAM7776 is therefore inhibition of C14orf113 (Accession NP_060100.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C14orf113.

[51407] C14orf143 (Accession NP_660274.1) is another GAM7776

target gene, herein designated TARGET GENE. C14orf143 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C14orf143, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C14orf143 BINDING SITE, designated SEQ ID:17955, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51408] Another function of GAM7776 is therefore inhibition of C14orf143 (Accession NP_660274.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C14orf143.

[51409] C14orf92 (Accession NP_055643.1) is another GAM7776 target gene, herein designated TARGET GENE. C14orf92 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C14orf92, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C14orf92 BINDING SITE, designated SEQ ID:14861, to the nucleotide sequence of GAM7776 RNA, herein designated

GAM RNA, also designated SEQ ID:246.

[51410] Another function of GAM7776 is therefore inhibition of C14orf92 (Accession NP_055643.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C14orf92.

[51411] Chromosome 1 open reading frame 24 (C1orf24, Accession NP_443198.1) is another GAM7776 target gene, herein designated TARGET GENE. C1orf24 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by C1orf24, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C1orf24 BINDING SITE, designated SEQ ID:19538, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51412] Another function of GAM7776 is therefore inhibition of Chromosome 1 open reading frame 24 (C1orf24, Accession NP_443198.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C1orf24.

[51413] C1q and tumor necrosis factor related protein 6

(C1QTNF6, Accession NP_114116.2) is another GAM7776 target gene, herein designated TARGET GENE. C1QTNF6 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C1QTNF6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C1QTNF6 BINDING SITE, designated SEQ ID:14882, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51414] Another function of GAM7776 is therefore inhibition of C1q and tumor necrosis factor related protein 6 (C1QTNF6, Accession NP_114116.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C1QTNF6.

[51415] Chromosome 20 open reading frame 147 (C20orf147, Accession NP_689880.1) is another GAM7776 target gene, herein designated TARGET GENE. C20orf147 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C20orf147, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the com-

plementarity of the nucleotide sequences of C20orf147 BINDING SITE, designated SEQ ID:16257, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51416] Another function of GAM7776 is therefore inhibition of Chromosome 20 open reading frame 147 (C20orf147, Accession NP_689880.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C20orf147.

[51417] Chromosome 21 open reading frame 67 (C21orf67, Accession NP_478068.1) is another GAM7776 target gene, herein designated TARGET GENE. C21orf67 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by C21orf67, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C21orf67 BINDING SITE, designated SEQ ID:6569, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51418] Another function of GAM7776 is therefore inhibition of Chromosome 21 open reading frame 67 (C21orf67, Accession NP_478068.1) . Accordingly, utilities of GAM7776

include diagnosis, prevention and treatment of diseases and clinical conditions associated with C21orf67.

[51419] Chromosome 22 open reading frame 19 (C22orf19, Accession NP_003669.2) is another GAM7776 target gene, herein designated TARGET GENE. C22orf19 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C22orf19, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C22orf19 BINDING SITE, designated SEQ ID:18897, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51420] Another function of GAM7776 is therefore inhibition of Chromosome 22 open reading frame 19 (C22orf19, Accession NP_003669.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C22orf19.

[51421] C4orf9 (Accession XP_035572.1) is another GAM7776 target gene, herein designated TARGET GENE. C4orf9 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C4orf9, corresponding to a target binding site such as BINDING SITE I, BINDING

SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C4orf9 BINDING SITE, designated SEQ ID:15574, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51422] Another function of GAM7776 is therefore inhibition of C4orf9 (Accession XP_035572.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C4orf9.

[51423] Chromosome 6 open reading frame 33 (C6orf33, Accession NP_588608.1) is another GAM7776 target gene, herein designated TARGET GENE. C6orf33 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C6orf33, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C6orf33 BINDING SITE, designated SEQ ID:6896, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51424] Another function of GAM7776 is therefore inhibition of Chromosome 6 open reading frame 33 (C6orf33, Accession NP_588608.1) . Accordingly, utilities of GAM7776 in-

clude diagnosis, prevention and treatment of diseases and clinical conditions associated with C6orf33.

[51425] C6orf5 (Accession NP_056339.2) is another GAM7776 target gene, herein designated TARGET GENE. C6orf5 BINDING SITE1 and C6orf5 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by C6orf5, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C6orf5 BINDING SITE1 and C6orf5 BINDING SITE2, designated SEQ ID:10099 and SEQ ID:12805 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51426] Another function of GAM7776 is therefore inhibition of C6orf5 (Accession NP_056339.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C6orf5.

[51427] C6orf57 (Accession NP_660310.1) is another GAM7776 target gene, herein designated TARGET GENE. C6orf57 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C6orf57, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C6orf57 BINDING SITE, designated SEQ ID:2114, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51428] Another function of GAM7776 is therefore inhibition of C6orf57 (Accession NP_660310.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C6orf57.

[51429] Complement component 7 (C7, Accession NP_000578.1) is another GAM7776 target gene, herein designated TARGET GENE. C7 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C7, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C7 BINDING SITE, designated SEQ ID:17778, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51430] Another function of GAM7776 is therefore inhibition of Complement component 7 (C7, Accession NP_000578.1) . Accordingly, utilities of GAM7776 include diagnosis, pre-

vention and treatment of diseases and clinical conditions associated with C7.

[51431] Chromosome 9 open reading frame 5 (C9orf5, Accession NP_114401.1) is another GAM7776 target gene, herein designated TARGET GENE. C9orf5 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C9orf5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C9orf5 BINDING SITE, designated SEQ ID:14258, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51432] Another function of GAM7776 is therefore inhibition of Chromosome 9 open reading frame 5 (C9orf5, Accession NP_114401.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C9orf5.

[51433] Chromosome 9 open reading frame 9 (C9orf9, Accession NP_061829.2) is another GAM7776 target gene, herein designated TARGET GENE. C9orf9 BINDING SITE1 and C9orf9 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by C9orf9, corre-

sponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C9orf9 BINDING SITE1 and C9orf9 BINDING SITE2, designated SEQ ID:5477 and SEQ ID:11520 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51434] Another function of GAM7776 is therefore inhibition of Chromosome 9 open reading frame 9 (C9orf9, Accession NP_061829.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C9orf9.

[51435] CAB2 (Accession NP_219487.2) is another GAM7776 target gene, herein designated TARGET GENE. CAB2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CAB2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CAB2 BINDING SITE, designated SEQ ID:9181, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51436] Another function of GAM7776 is therefore inhibition of

CAB2 (Accession NP_219487.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CAB2.

[51437] Calcium binding protein 4 (CABP4, Accession NP_660201.1) is another GAM7776 target gene, herein designated TARGET GENE. CABP4 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by CABP4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CABP4 BINDING SITE, designated SEQ ID:7624, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51438] Another function of GAM7776 is therefore inhibition of Calcium binding protein 4 (CABP4, Accession NP_660201.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CABP4.

[51439] Calneuron 1 (CALN1, Accession NP_113656.1) is another GAM7776 target gene, herein designated TARGET GENE. CALN1 BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by CALN1, cor-

responding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CALN1 BINDING SITE, designated SEQ ID:17850, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51440] Another function of GAM7776 is therefore inhibition of Calneuron 1 (CALN1, Accession NP_113656.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CALN1.

[51441] Calcium modulating ligand (CAMLG, Accession NP_001736.1) is another GAM7776 target gene, herein designated TARGET GENE. CAMLG BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CAMLG, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CAMLG BINDING SITE, designated SEQ ID:18944, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51442] Another function of GAM7776 is therefore inhibition of

Calcium modulating ligand (CAMLG, Accession NP_001736.1), a gene which is likely involved in the mobilization of calcium as a result of the tcr/cd3 complex interaction. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CAMLG.

[51443] The function of CAMLG and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM130.1. Calpain 6 (CAPN6, Accession NP_055104.2) is another GAM7776 target gene, herein designated TARGET GENE. CAPN6 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CAPN6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CAPN6 BINDING SITE, designated SEQ ID:2208, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51444] Another function of GAM7776 is therefore inhibition of Calpain 6 (CAPN6, Accession NP_055104.2). Accordingly, utilities of GAM7776 include diagnosis, prevention and

treatment of diseases and clinical conditions associated with CAPN6.

[51445] CAPRI (Accession NP_008920.3) is another GAM7776 target gene, herein designated TARGET GENE. CAPRI BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CAPRI, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CAPRI BINDING SITE, designated SEQ ID:4271, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51446] Another function of GAM7776 is therefore inhibition of CAPRI (Accession NP_008920.3) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CAPRI.

[51447] Caspase recruitment domain family, member 6 (CARD6, Accession NP_115976.2) is another GAM7776 target gene, herein designated TARGET GENE. CARD6 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CARD6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the comple-

mentarity of the nucleotide sequences of CARD6 BINDING SITE, designated SEQ ID:9036, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51448] Another function of GAM7776 is therefore inhibition of Caspase recruitment domain family, member 6 (CARD6, Accession NP_115976.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CARD6.

[51449] Caspase 2, apoptosis-related cysteine protease (neural precursor cell expressed, developmentally down-regulated 2) (CASP2, Accession NP_116765.1) is another GAM7776 target gene, herein designated TARGET GENE. CASP2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CASP2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CASP2 BINDING SITE, designated SEQ ID:16398, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51450] Another function of GAM7776 is therefore inhibition of

Caspase 2, apoptosis-related cysteine protease (neural precursor cell expressed, developmentally down-regulated 2) (CASP2, Accession NP_116765.1), a gene which involves in the activation cascade of caspases responsible for apoptosis execution. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CASP2.

[51451] The function of CASP2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM139.1. Caspase 2, apoptosis-related cysteine protease (neural precursor cell expressed, developmentally down-regulated 2) (CASP2, Accession NP_001215.1) is another GAM7776 target gene, herein designated TARGET GENE. CASP2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CASP2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CASP2 BINDING SITE, designated SEQ ID:16398, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51452] Another function of GAM7776 is therefore inhibition of Caspase 2, apoptosis-related cysteine protease (neural precursor cell expressed, developmentally down-regulated 2) (CASP2, Accession NP_001215.1), a gene which involves in the activation cascade of caspases responsible for apoptosis execution. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CASP2.

[51453] The function of CASP2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM139.1. Caspase 2, apoptosis-related cysteine protease (neural precursor cell expressed, developmentally down-regulated 2) (CASP2, Accession NP_116766.1) is another GAM7776 target gene, herein designated TARGET GENE. CASP2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CASP2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CASP2 BINDING SITE, designated SEQ ID:16398, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also design-

nated SEQ ID:246.

[51454] Another function of GAM7776 is therefore inhibition of Caspase 2, apoptosis-related cysteine protease (neural precursor cell expressed, developmentally down-regulated 2) (CASP2, Accession NP_116766.1), a gene which involves in the activation cascade of caspases responsible for apoptosis execution. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CASP2.

[51455] The function of CASP2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM139.1. Caspase 2, apoptosis-related cysteine protease (neural precursor cell expressed, developmentally down-regulated 2) (CASP2, Accession NP_116764.1) is another GAM7776 target gene, herein designated TARGET GENE. CASP2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CASP2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CASP2 BINDING SITE, designated SEQ ID:16398, to the nucleotide sequence of

GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51456] Another function of GAM7776 is therefore inhibition of Caspase 2, apoptosis-related cysteine protease (neural precursor cell expressed, developmentally down-regulated 2) (CASP2, Accession NP_116764.1), a gene which involves in the activation cascade of caspases responsible for apoptosis execution. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CASP2.

[51457] The function of CASP2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM139.1. Caspase 8, apoptosis-related cysteine protease (CASP8, Accession NP_203519.1) is another GAM7776 target gene, herein designated TARGET GENE. CASP8 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CASP8, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CASP8 BINDING SITE, designated SEQ ID:15049, to the nucleotide sequence of GAM7776

RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51458] Another function of GAM7776 is therefore inhibition of Caspase 8, apoptosis-related cysteine protease (CASP8, Accession NP_203519.1), a gene which is an apoptosis-related caspase and an upstream component of Fas receptor and tumor necrosis factor (TNF) receptor-induced apoptosis. and therefore may be associated with Huntington-related neurodegenerative diseases. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Huntington-related neurodegenerative diseases, and of other diseases and clinical conditions associated with CASP8.

[51459] The function of CASP8 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM72.1. Caspase 8, apoptosis-related cysteine protease (CASP8, Accession NP_203520.1) is another GAM7776 target gene, herein designated TARGET GENE. CASP8 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CASP8, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III

of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CASP8 BINDING SITE, designated SEQ ID:15049, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51460] Another function of GAM7776 is therefore inhibition of Caspase 8, apoptosis-related cysteine protease (CASP8, Accession NP_203520.1), a gene which is an apoptosis-related caspase and an upstream component of Fas receptor and tumor necrosis factor (TNF) receptor-induced apoptosis. and therefore may be associated with Huntington-related neurodegenerative diseases. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Huntington-related neurodegenerative diseases, and of other diseases and clinical conditions associated with CASP8.

[51461] The function of CASP8 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM72.1. Caspase 8, apoptosis-related cysteine protease (CASP8, Accession NP_203521.1) is another GAM7776 target gene, herein designated TARGET GENE. CASP8 BINDING SITE is a target binding site found in the

3' untranslated region of multiple transcripts of mRNA encoded by CASP8, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CASP8 BINDING SITE, designated SEQ ID:15049, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51462] Another function of GAM7776 is therefore inhibition of Caspase 8, apoptosis-related cysteine protease (CASP8, Accession NP_203521.1), a gene which is an apoptosis-related caspase and an upstream component of Fas receptor and tumor necrosis factor (TNF) receptor-induced apoptosis. and therefore may be associated with Huntington-related neurodegenerative diseases. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Huntington-related neurodegenerative diseases, and of other diseases and clinical conditions associated with CASP8.

[51463] The function of CASP8 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM72.1.Caspase 8, apoptosis-related cysteine pro-

tease (CASP8, Accession NP_001219.2) is another GAM7776 target gene, herein designated TARGET GENE. CASP8 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CASP8, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CASP8 BINDING SITE, designated SEQ ID:15049, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51464] Another function of GAM7776 is therefore inhibition of Caspase 8, apoptosis-related cysteine protease (CASP8, Accession NP_001219.2), a gene which is an apoptosis-related caspase and an upstream component of Fas receptor and tumor necrosis factor (TNF) receptor-induced apoptosis. and therefore may be associated with Huntington-related neurodegenerative diseases. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Huntington-related neurodegenerative diseases, and of other diseases and clinical conditions associated with CASP8.

[51465] The function of CASP8 and its association with various

diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM72.1.CASPR4 (Accession NP_620481.1) is another GAM7776 target gene, herein designated TARGET GENE. CASPR4 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CASPR4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CASPR4 BINDING SITE, designated SEQ ID:13634, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51466] Another function of GAM7776 is therefore inhibition of CASPR4 (Accession NP_620481.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CASPR4.

[51467] Core-binding factor, runt domain, alpha subunit 2; translocated to, 2 (CBFA2T2, Accession NP_787060.1) is another GAM7776 target gene, herein designated TARGET GENE. CBFA2T2 BINDING SITE1 and CBFA2T2 BINDING SITE2 are target binding sites found in untranslated re-

gions of multiple transcripts of mRNA encoded by CBFA2T2, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CBFA2T2 BINDING SITE1 and CBFA2T2 BINDING SITE2, designated SEQ ID:8242 and SEQ ID:8572 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51468] Another function of GAM7776 is therefore inhibition of Core-binding factor, runt domain, alpha subunit 2; translocated to, 2 (CBFA2T2, Accession NP_787060.1), a gene which is a putative transcription factor. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CBFA2T2.

[51469] The function of CBFA2T2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM55.1. Core-binding factor, runt domain, alpha subunit 2; translocated to, 2 (CBFA2T2, Accession NP_787060.1) is another GAM7776 target gene, herein designated TARGET GENE. CBFA2T2 BINDING SITE1 and

CBFA2T2 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by CBFA2T2, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CBFA2T2 BINDING SITE1 and CBFA2T2 BINDING SITE2, designated SEQ ID:8572 and SEQ ID:9543 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51470] Another function of GAM7776 is therefore inhibition of Core-binding factor, runt domain, alpha subunit 2; translocated to, 2 (CBFA2T2, Accession NP_787060.1), a gene which is a putative transcription factor. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CBFA2T2.

[51471] The function of CBFA2T2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM55.1. Chemokine (c-c motif) ligand 22 (CCL22, Accession NP_002981.2) is another GAM7776 target gene, herein designated TARGET GENE. CCL22 BINDING SITE1

and CCL22 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by CCL22, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CCL22 BINDING SITE1 and CCL22 BINDING SITE2, designated SEQ ID:15049 and SEQ ID:1679 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51472] Another function of GAM7776 is therefore inhibition of Chemokine (c-c motif) ligand 22 (CCL22, Accession NP_002981.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CCL22.

[51473] Cyclin f (CCNF, Accession NP_001752.1) is another GAM7776 target gene, herein designated TARGET GENE. CCNF BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CCNF, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CCNF BINDING SITE, designated SEQ ID:17624, to the nucleotide sequence of GAM7776 RNA, herein designated

GAM RNA, also designated SEQ ID:246.

[51474] Another function of GAM7776 is therefore inhibition of Cyclin f (CCNF, Accession NP_001752.1), a gene which likely to be involved in the control of the cell cycle during s phase and g2. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CCNF.

[51475] The function of CCNF and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM130.1.Ccr4 carbon catabolite repression 4-like (s. cerevisiae) (CCRN4L, Accession NP_036250.2) is another GAM7776 target gene, herein designated TARGET GENE. CCRN4L BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CCRN4L, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CCRN4L BINDING SITE, designated SEQ ID:4698, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51476] Another function of GAM7776 is therefore inhibition of Ccr4 carbon catabolite repression 4-like (s. cerevisiae)

(CCRN4L, Accession NP_036250.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CCRN4L.

[51477] Cd209 antigen (CD209, Accession NP_066978.1) is another GAM7776 target gene, herein designated TARGET GENE. CD209 BINDING SITE1 and CD209 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by CD209, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CD209 BINDING SITE1 and CD209 BINDING SITE2, designated SEQ ID:17051 and SEQ ID:4298 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51478] Another function of GAM7776 is therefore inhibition of Cd209 antigen (CD209, Accession NP_066978.1), a gene which may play an important role in the CD4- independent association of HIV with cells. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CD209.

[51479] The function of CD209 and its association with various

diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM96.1.Cd24 antigen (small cell lung carcinoma cluster 4 antigen) (CD24, Accession NP_037362.1) is another GAM7776 target gene, herein designated TARGET GENE. CD24 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CD24, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CD24 BINDING SITE, designated SEQ ID:19572, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51480] Another function of GAM7776 is therefore inhibition of Cd24 antigen (small cell lung carcinoma cluster 4 antigen) (CD24, Accession NP_037362.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CD24.

[51481] Cd5 antigen (p56-62) (CD5, Accession NP_055022.1) is another GAM7776 target gene, herein designated TARGET GENE. CD5 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by CD5, corresponding to a target binding site such as BINDING

SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CD5 BINDING SITE, designated SEQ ID:1049, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51482] Another function of GAM7776 is therefore inhibition of Cd5 antigen (p56-62) (CD5, Accession NP_055022.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CD5.

[51483] Cd84 antigen (leukocyte antigen) (CD84, Accession NP_003865.1) is another GAM7776 target gene, herein designated TARGET GENE. CD84 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CD84, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CD84 BINDING SITE, designated SEQ ID:514, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51484] Another function of GAM7776 is therefore inhibition of Cd84 antigen (leukocyte antigen) (CD84, Accession NP_003865.1) . Accordingly, utilities of GAM7776 include

diagnosis, prevention and treatment of diseases and clinical conditions associated with CD84.

[51485] Cdc14 cell division cycle 14 homolog b (*s. cerevisiae*) (CDC14B, Accession NP_201589.1) is another GAM7776 target gene, herein designated TARGET GENE. CDC14B BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CDC14B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CDC14B BINDING SITE, designated SEQ ID:17127, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51486] Another function of GAM7776 is therefore inhibition of Cdc14 cell division cycle 14 homolog b (*s. cerevisiae*) (CDC14B, Accession NP_201589.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CDC14B.

[51487] Cell division cycle 2-like 2 (CDC2L2, Accession NP_296370.1) is another GAM7776 target gene, herein designated TARGET GENE. CDC2L2 BINDING SITE is a tar-

get binding site found in the 5` untranslated region of multiple transcripts of mRNA encoded by CDC2L2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CDC2L2 BINDING SITE, designated SEQ ID:15084, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51488] Another function of GAM7776 is therefore inhibition of Cell division cycle 2-like 2 (CDC2L2, Accession NP_296370.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CDC2L2.

[51489] Cdc6 cell division cycle 6 homolog (s. cerevisiae) (CDC6, Accession NP_001245.1) is another GAM7776 target gene, herein designated TARGET GENE. CDC6 BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by CDC6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CDC6 BINDING SITE, designated SEQ ID:9211, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also design-

nated SEQ ID:246.

[51490] Another function of GAM7776 is therefore inhibition of Cdc6 cell division cycle 6 homolog (*s. cerevisiae*) (CDC6, Accession NP_001245.1), a gene which is a component of the origin recognition complex (orc) that binds origins of replication. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CDC6.

[51491] The function of CDC6 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1.CDCP1 (Accession NP_073753.3) is another GAM7776 target gene, herein designated TARGET GENE. CDCP1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CDCP1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CDCP1 BINDING SITE, designated SEQ ID:12091, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51492] Another function of GAM7776 is therefore inhibition of

CDCP1 (Accession NP_073753.3) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CDCP1.

[51493] Cadherin 1, type 1, e-cadherin (epithelial) (CDH1, Accession NP_004351.1) is another GAM7776 target gene, herein designated TARGET GENE. CDH1 BINDING SITE1 and CDH1 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by CDH1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CDH1 BINDING SITE1 and CDH1 BINDING SITE2, designated SEQ ID:12580 and SEQ ID:5514 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51494] Another function of GAM7776 is therefore inhibition of Cadherin 1, type 1, e-cadherin (epithelial) (CDH1, Accession NP_004351.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CDH1.

[51495] Cadherin 17, li cadherin (liver-intestine) (CDH17, Accession NP_004054.2) is another GAM7776 target gene, herein designated TARGET GENE. CDH17 BINDING SITE is a

target binding site found in the 3' untranslated region of mRNA encoded by CDH17, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CDH17 BINDING SITE, designated SEQ ID:13851, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51496] Another function of GAM7776 is therefore inhibition of Cadherin 17, li cadherin (liver-intestine) (CDH17, Accession NP_004054.2), a gene which may have a role in the morphological organization of liver and intestine and involved in intestinal peptide transport. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CDH17.

[51497] The function of CDH17 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM161.1.CDK11 (Accession XP_166324.1) is another GAM7776 target gene, herein designated TARGET GENE. CDK11 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CDK11, corresponding to a target binding site

such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CDK11 BINDING SITE, designated SEQ ID:8162, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51498] Another function of GAM7776 is therefore inhibition of CDK11 (Accession XP_166324.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CDK11.

[51499] CDKAL1 (Accession NP_060244.1) is another GAM7776 target gene, herein designated TARGET GENE. CDKAL1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CDKAL1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CDKAL1 BINDING SITE, designated SEQ ID:1255, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51500] Another function of GAM7776 is therefore inhibition of CDKAL1 (Accession NP_060244.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment

of diseases and clinical conditions associated with CD-KAL1.

[51501] Carcinoembryonic antigen-related cell adhesion molecule 8 (CEACAM8, Accession NP_001807.2) is another GAM7776 target gene, herein designated TARGET GENE. CEACAM8 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CEACAM8, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CEACAM8 BINDING SITE, designated SEQ ID:17969, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51502] Another function of GAM7776 is therefore inhibition of Carcinoembryonic antigen-related cell adhesion molecule 8 (CEACAM8, Accession NP_001807.2). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CEACAM8.

[51503] Cat eye syndrome chromosome region, candidate 1 (CECR1, Accession NP_059120.2) is another GAM7776 target gene, herein designated TARGET GENE. CECR1

BINDING SITE1 and CECR1 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by CECR1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CECR1 BINDING SITE1 and CECR1 BINDING SITE2, designated SEQ ID:4574 and SEQ ID:9037 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51504] Another function of GAM7776 is therefore inhibition of Cat eye syndrome chromosome region, candidate 1 (CECR1, Accession NP_059120.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CECR1.

[51505] Cat eye syndrome chromosome region, candidate 1 (CECR1, Accession NP_803124.1) is another GAM7776 target gene, herein designated TARGET GENE. CECR1 BINDING SITE1 and CECR1 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by CECR1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the com-

plementarity of the nucleotide sequences of CECR1 BINDING SITE1 and CECR1 BINDING SITE2, designated SEQ ID:9037 and SEQ ID:4574 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51506] Another function of GAM7776 is therefore inhibition of Cat eye syndrome chromosome region, candidate 1 (CECR1, Accession NP_803124.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CECR1.

[51507] Centromere protein h (CENPH, Accession NP_075060.1) is another GAM7776 target gene, herein designated TARGET GENE. CENPH BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CENPH, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CENPH BINDING SITE, designated SEQ ID:19549, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51508] Another function of GAM7776 is therefore inhibition of Centromere protein h (CENPH, Accession NP_075060.1) .

Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CENPH.

[51509] Centromere protein j (CENPJ, Accession NP_060921.2) is another GAM7776 target gene, herein designated TARGET GENE. CENPJ BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by CENPJ, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CENPJ BINDING SITE, designated SEQ ID:13565, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51510] Another function of GAM7776 is therefore inhibition of Centromere protein j (CENPJ, Accession NP_060921.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CENPJ.

[51511] CGI-150 (Accession NP_057164.1) is another GAM7776 target gene, herein designated TARGET GENE. CGI-150 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by CGI-150, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CGI-150 BINDING SITE, designated SEQ ID:2191, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51512] Another function of GAM7776 is therefore inhibition of CGI-150 (Accession NP_057164.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CGI-150.

[51513] CGI-18 (Accession NP_057031.1) is another GAM7776 target gene, herein designated TARGET GENE. CGI-18 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by CGI-18, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CGI-18 BINDING SITE, designated SEQ ID:18313, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51514] Another function of GAM7776 is therefore inhibition of CGI-18 (Accession NP_057031.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of

diseases and clinical conditions associated with CGI-18.

[51515] CGI-43 (Accession NP_056437.1) is another GAM7776 target gene, herein designated TARGET GENE. CGI-43 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CGI-43, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CGI-43 BINDING SITE, designated SEQ ID:14860, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51516] Another function of GAM7776 is therefore inhibition of CGI-43 (Accession NP_056437.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CGI-43.

[51517] Chromosome condensation 1-like (CHC1L, Accession NP_001259.1) is another GAM7776 target gene, herein designated TARGET GENE. CHC1L BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by CHC1L, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CHC1L BINDING SITE, designated

SEQ ID:15582, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51518] Another function of GAM7776 is therefore inhibition of Chromosome condensation 1-like (CHC1L, Accession NP_001259.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CHC1L.

[51519] Chromatin accessibility complex 1 (CHRAC1, Accession NP_059140.1) is another GAM7776 target gene, herein designated TARGET GENE. CHRAC1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CHRAC1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CHRAC1 BINDING SITE, designated SEQ ID:9475, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51520] Another function of GAM7776 is therefore inhibition of Chromatin accessibility complex 1 (CHRAC1, Accession NP_059140.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical

cal conditions associated with CHRAC1.

[51521] Carbohydrate (chondroitin) synthase 1 (CHSY1, Accession NP_055733.2) is another GAM7776 target gene, herein designated TARGET GENE. CHSY1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CHSY1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CHSY1 BINDING SITE, designated SEQ ID:11924, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51522] Another function of GAM7776 is therefore inhibition of Carbohydrate (chondroitin) synthase 1 (CHSY1, Accession NP_055733.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CHSY1.

[51523] Cold autoinflammatory syndrome 1 (CIAS1, Accession NP_004886.2) is another GAM7776 target gene, herein designated TARGET GENE. CIAS1 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by CIAS1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III

of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CIAS1 BINDING SITE, designated SEQ ID:13461, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51524] Another function of GAM7776 is therefore inhibition of Cold autoinflammatory syndrome 1 (CIAS1, Accession NP_004886.2), a gene which may mediate protein- protein interactions; contains a leucine rich repeat and therefore may be associated with Familial cold autoinflammatory syndrome, muckle- wells syndrome. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Familial cold autoinflammatory syndrome, muckle- wells syndrome, and of other diseases and clinical conditions associated with CIAS1.

[51525] The function of CIAS1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM90.1.CIP29 (Accession NP_115740.3) is another GAM7776 target gene, herein designated TARGET GENE. CIP29 BINDING SITE1 and CIP29 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by CIP29, corresponding to target binding sites

such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CIP29 BINDING SITE1 and CIP29 BINDING SITE2, designated SEQ ID:3509 and SEQ ID:20120 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51526] Another function of GAM7776 is therefore inhibition of CIP29 (Accession NP_115740.3) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CIP29.

[51527] Claudin 19 (CLDN19, Accession NP_683763.1) is another GAM7776 target gene, herein designated TARGET GENE. CLDN19 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CLDN19, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CLDN19 BINDING SITE, designated SEQ ID:5914, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51528] Another function of GAM7776 is therefore inhibition of Claudin 19 (CLDN19, Accession NP_683763.1) . Accord-

ingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CLDN19.

[51529] C-type (calcium dependent, carbohydrate-recognition domain) lectin, superfamily member 12 (CLECSF12, Accession NP_072092.2) is another GAM7776 target gene, herein designated TARGET GENE. CLECSF12 BINDING SITE1 and CLECSF12 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by CLECSF12, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CLECSF12 BINDING SITE1 and CLECSF12 BINDING SITE2, designated SEQ ID:16192 and SEQ ID:15296 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51530] Another function of GAM7776 is therefore inhibition of C-type (calcium dependent, carbohydrate-recognition domain) lectin, superfamily member 12 (CLECSF12, Accession NP_072092.2), a gene which is a pattern-recognition receptor. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical

conditions associated with CLECSF12.

[51531] The function of CLECSF12 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM47.1. Chloride intracellular channel 5 (CLIC5, Accession NP_058625.1) is another GAM7776 target gene, herein designated TARGET GENE. CLIC5 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by CLIC5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CLIC5 BINDING SITE, designated SEQ ID:19116, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51532] Another function of GAM7776 is therefore inhibition of Chloride intracellular channel 5 (CLIC5, Accession NP_058625.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CLIC5.

[51533] Ceroid-lipofuscinosis, neuronal 8 (epilepsy, progressive with mental retardation) (CLN8, Accession NP_061764.2) is another GAM7776 target gene, herein designated TAR-

GET GENE. CLN8 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CLN8, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CLN8 BINDING SITE, designated SEQ ID:515, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51534] Another function of GAM7776 is therefore inhibition of Ceroid-lipofuscinosis, neuronal 8 (epilepsy, progressive with mental retardation) (CLN8, Accession NP_061764.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CLN8.

[51535] Chloride channel, nucleotide-sensitive, 1a (CLNS1A, Accession NP_001284.1) is another GAM7776 target gene, herein designated TARGET GENE. CLNS1A BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CLNS1A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CLNS1A BINDING SITE, designated SEQ ID:18823, to the nucleotide se-

quence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51536] Another function of GAM7776 is therefore inhibition of Chloride channel, nucleotide-sensitive, 1a (CLNS1A, Accession NP_001284.1), a gene which may participate in cellular volume control . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CLNS1A.

[51537] The function of CLNS1A and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM96.1.Cell matrix adhesion regulator (CMAR, Accession NP_005191.2) is another GAM7776 target gene, herein designated TARGET GENE. CMAR BINDING SITE1 and CMAR BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by CMAR, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CMAR BINDING SITE1 and CMAR BINDING SITE2, designated SEQ ID:18767 and SEQ ID:5053 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51538] Another function of GAM7776 is therefore inhibition of Cell matrix adhesion regulator (CMAR, Accession NP_005191.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CMAR.

[51539] Calponin 2 (CNN2, Accession NP_004359.1) is another GAM7776 target gene, herein designated TARGET GENE. CNN2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CNN2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CNN2 BINDING SITE, designated SEQ ID:9959, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51540] Another function of GAM7776 is therefore inhibition of Calponin 2 (CNN2, Accession NP_004359.1), a gene which may be involved in the structural organization and/or anchorage of actin filaments. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CNN2.

[51541] The function of CNN2 and its association with various diseases and clinical conditions, has been established by

previous studies, as described hereinabove with reference to GAM136.1.2',3'-cyclic nucleotide 3' phosphodiesterase (CNP, Accession NP_149124.1) is another GAM7776 target gene, herein designated TARGET GENE. CNP BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CNP, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CNP BINDING SITE, designated SEQ ID:606, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51542] Another function of GAM7776 is therefore inhibition of 2',3'-cyclic nucleotide 3' phosphodiesterase (CNP, Accession NP_149124.1), a gene which can link tubulin to membranes and may regulate cytoplasmic microtubule distribution. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CNP.

[51543] The function of CNP and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1.Collectin sub-family member 12 (COLEC12,

Accession NP_110408.2) is another GAM7776 target gene, herein designated TARGET GENE. COLEC12 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by COLEC12, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of COLEC12 BINDING SITE, designated SEQ ID:11525, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51544] Another function of GAM7776 is therefore inhibition of Collectin sub-family member 12 (COLEC12, Accession NP_110408.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with COLEC12.

[51545] Coronin, actin binding protein, 1c (CORO1C, Accession NP_055140.1) is another GAM7776 target gene, herein designated TARGET GENE. CORO1C BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CORO1C, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the comple-

mentarity of the nucleotide sequences of CORO1C BINDING SITE, designated SEQ ID:13595, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51546] Another function of GAM7776 is therefore inhibition of Coronin, actin binding protein, 1c (CORO1C, Accession NP_055140.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CORO1C.

[51547] Cox15 homolog, cytochrome c oxidase assembly protein (yeast) (COX15, Accession NP_510870.1) is another GAM7776 target gene, herein designated TARGET GENE. COX15 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by COX15, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of COX15 BINDING SITE, designated SEQ ID:7552, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51548] Another function of GAM7776 is therefore inhibition of Cox15 homolog, cytochrome c oxidase assembly protein

(yeast) (COX15, Accession NP_510870.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with COX15.

[51549] Carboxypeptidase a4 (CPA4, Accession NP_057436.1) is another GAM7776 target gene, herein designated TARGET GENE. CPA4 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CPA4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CPA4 BINDING SITE, designated SEQ ID:8942, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51550] Another function of GAM7776 is therefore inhibition of Carboxypeptidase a4 (CPA4, Accession NP_057436.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CPA4.

[51551] CPR8 (Accession NP_065790.1) is another GAM7776 target gene, herein designated TARGET GENE. CPR8 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CPR8,

corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CPR8 BINDING SITE, designated SEQ ID:13999, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51552] Another function of GAM7776 is therefore inhibition of CPR8 (Accession NP_065790.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CPR8.

[51553] Carbamoyl-phosphate synthetase 1, mitochondrial (CPS1, Accession NP_001866.2) is another GAM7776 target gene, herein designated TARGET GENE. CPS1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CPS1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CPS1 BINDING SITE, designated SEQ ID:14493, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51554] Another function of GAM7776 is therefore inhibition of Carbamoyl-phosphate synthetase 1, mitochondrial (CPS1,

Accession NP_001866.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CPS1.

[51555] Cleavage and polyadenylation specific factor 2, 100kda (CPSF2, Accession XP_029311.2) is another GAM7776 target gene, herein designated TARGET GENE. CPSF2 BINDING SITE1 and CPSF2 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by CPSF2, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CPSF2 BINDING SITE1 and CPSF2 BINDING SITE2, designated SEQ ID:1877 and SEQ ID:591 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51556] Another function of GAM7776 is therefore inhibition of Cleavage and polyadenylation specific factor 2, 100kda (CPSF2, Accession XP_029311.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CPSF2.

[51557] Complement component (3b/4b) receptor 1, including knops blood group system (CR1, Accession NP_000564.1)

is another GAM7776 target gene, herein designated TARGET GENE. CR1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CR1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CR1 BINDING SITE, designated SEQ ID:17292, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51558] Another function of GAM7776 is therefore inhibition of Complement component (3b/4b) receptor 1, including knops blood group system (CR1, Accession NP_000564.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CR1.

[51559] Complement component (3b/4b) receptor 1, including knops blood group system (CR1, Accession NP_000642.2) is another GAM7776 target gene, herein designated TARGET GENE. CR1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CR1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING

SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CR1 BINDING SITE, designated SEQ ID:17292, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51560] Another function of GAM7776 is therefore inhibition of Complement component (3b/4b) receptor 1, including knops blood group system (CR1, Accession NP_000642.2). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CR1.

[51561] Cytokine receptor-like factor 3 (CRLF3, Accession NP_057070.2) is another GAM7776 target gene, herein designated TARGET GENE. CRLF3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CRLF3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CRLF3 BINDING SITE, designated SEQ ID:7105, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51562] Another function of GAM7776 is therefore inhibition of

Cytokine receptor-like factor 3 (CRLF3, Accession NP_057070.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CRLF3.

[51563] Cofactor required for sp1 transcriptional activation, subunit 6, 77kda (CRSP6, Accession NP_004259.3) is another GAM7776 target gene, herein designated TARGET GENE. CRSP6 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CRSP6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CRSP6 BINDING SITE, designated SEQ ID:7661, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51564] Another function of GAM7776 is therefore inhibition of Cofactor required for sp1 transcriptional activation, subunit 6, 77kda (CRSP6, Accession NP_004259.3), a gene which is required for Sp1 mediated transcriptional activation with TAF(II)s. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CRSP6.

[51565] The function of CRSP6 and its association with various

diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1. Cartilage associated protein (CRTAP, Accession NP_006362.1) is another GAM7776 target gene, herein designated TARGET GENE. CRTAP BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CRTAP, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CRTAP BINDING SITE, designated SEQ ID:7107, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51566] Another function of GAM7776 is therefore inhibition of Cartilage associated protein (CRTAP, Accession NP_006362.1), a gene which is a novel developmentally regulated chick embryo protein. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CRTAP.

[51567] The function of CRTAP and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM136.1. CSE-C (Accession NP_061851.1) is another

GAM7776 target gene, herein designated TARGET GENE. CSE-C BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by CSE-C, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CSE-C BINDING SITE, designated SEQ ID:2336, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51568] Another function of GAM7776 is therefore inhibition of CSE-C (Accession NP_061851.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CSE-C.

[51569] Cse1 chromosome segregation 1-like (yeast) (CSE1L, Accession NP_803185.1) is another GAM7776 target gene, herein designated TARGET GENE. CSE1L BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CSE1L, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CSE1L BINDING SITE, designated SEQ ID:6312, to the nu-

cleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51570] Another function of GAM7776 is therefore inhibition of Cse1 chromosome segregation 1-like (yeast) (CSE1L, Accession NP_803185.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CSE1L.

[51571] Casein kinase 2, alpha prime polypeptide (CSNK2A2, Accession NP_001887.1) is another GAM7776 target gene, herein designated TARGET GENE. CSNK2A2 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by CSNK2A2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CSNK2A2 BINDING SITE, designated SEQ ID:15382, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51572] Another function of GAM7776 is therefore inhibition of Casein kinase 2, alpha prime polypeptide (CSNK2A2, Accession NP_001887.1), a gene which catalyzes the phosphorylation of serine or threonine residues in proteins. Accordingly, utilities of GAM7776 include diagnosis, pre-

vention and treatment of diseases and clinical conditions associated with CSNK2A2.

[51573] The function of CSNK2A2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1.CTEN (Accession NP_116254.3) is another GAM7776 target gene, herein designated TARGET GENE. CTEN BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CTEN, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CTEN BINDING SITE, designated SEQ ID:14746, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51574] Another function of GAM7776 is therefore inhibition of CTEN (Accession NP_116254.3) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CTEN.

[51575] Cardiotrophin 1 (CTF1, Accession NP_001321.1) is another GAM7776 target gene, herein designated TARGET GENE. CTF1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CTF1,

corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CTF1 BINDING SITE, designated SEQ ID:13287, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51576] Another function of GAM7776 is therefore inhibition of Cardiotrophin 1 (CTF1, Accession NP_001321.1), a gene which may play a role in cardiac hypertrophy. and therefore may be associated with Cardiac hypertrophy. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Cardiac hypertrophy, and of other diseases and clinical conditions associated with CTF1.

[51577] The function of CTF1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1.Cathepsin s (CTSS, Accession NP_004070.3) is another GAM7776 target gene, herein designated TARGET GENE. CTSS BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CTSS, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of CTSS BINDING SITE, designated SEQ ID:4517, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51578] Another function of GAM7776 is therefore inhibition of Cathepsin s (CTSS, Accession NP_004070.3), a gene which is a lysosomal cysteine (thiol) protease that cleaves elastin. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CTSS.

[51579] The function of CTSS and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM72.1. Chemokine (c-x-c motif) ligand 16 (CXCL16, Accession NP_071342.1) is another GAM7776 target gene, herein designated TARGET GENE. CXCL16 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CXCL16, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CXCL16 BINDING SITE, designated SEQ ID:17688, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51580] Another function of GAM7776 is therefore inhibition of Chemokine (c-x-c motif) ligand 16 (CXCL16, Accession NP_071342.1), a gene which induces calcium mobilization. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CXCL16.

[51581] The function of CXCL16 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1.CYCS (Accession NP_061820.1) is another GAM7776 target gene, herein designated TARGET GENE. CYCS BINDING SITE1 through CYCS BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by CYCS, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CYCS BINDING SITE1 through CYCS BINDING SITE3, designated SEQ ID:18868, SEQ ID:9339 and SEQ ID:18991 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51582] Another function of GAM7776 is therefore inhibition of CYCS (Accession NP_061820.1) . Accordingly, utilities of

GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CYCS.

[51583] Cylicin, basic protein of sperm head cytoskeleton 2 (CYLC2, Accession NP_001331.1) is another GAM7776 target gene, herein designated TARGET GENE. CYLC2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CYLC2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CYLC2 BINDING SITE, designated SEQ ID:15540, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51584] Another function of GAM7776 is therefore inhibition of Cylicin, basic protein of sperm head cytoskeleton 2 (CYLC2, Accession NP_001331.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CYLC2.

[51585] Cytochrome p450, subfamily i (aromatic compound-inducible), polypeptide 2 (CYP1A2, Accession NP_000752.1) is another GAM7776 target gene, herein designated TARGET GENE. CYP1A2 BINDING SITE1 through CYP1A2 BINDING SITE3 are target binding sites found in untranslated

regions of mRNA encoded by CYP1A2, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CYP1A2 BINDING SITE1 through CYP1A2 BINDING SITE3, designated SEQ ID:6637, SEQ ID:13576 and SEQ ID:18279 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51586] Another function of GAM7776 is therefore inhibition of Cytochrome p450, subfamily i (aromatic compound-inducible), polypeptide 2 (CYP1A2, Accession NP_000752.1), a gene which intervenes in an NADPH-dependent electron transport pathway. and therefore may be associated with Porphyria cutanea tarda. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Porphyria cutanea tarda, and of other diseases and clinical conditions associated with CYP1A2.

[51587] The function of CYP1A2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1.Cytochrome p450, subfamily iib (phenobarbital-inducible), polypeptide 6 (CYP2B6, Accession NP_000758.1) is another GAM7776 target gene,

herein designated TARGET GENE. CYP2B6 BINDING SITE1 and CYP2B6 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by CYP2B6, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CYP2B6 BINDING SITE1 and CYP2B6 BINDING SITE2, designated SEQ ID:2194 and SEQ ID:10618 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51588] Another function of GAM7776 is therefore inhibition of Cytochrome p450, subfamily iib (phenobarbital-inducible), polypeptide 6 (CYP2B6, Accession NP_000758.1), a gene which oxidizes a variety of structurally unrelated compounds, including steroids, fatty acids, and xenobiotics. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CYP2B6.

[51589] The function of CYP2B6 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1.Cytochrome p450, subfamily ivf, polypeptide 3 (leukotriene b4 omega hydroxylase) (CYP4F3, Accession

NP_000887.1) is another GAM7776 target gene, herein designated TARGET GENE. CYP4F3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CYP4F3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CYP4F3 BINDING SITE, designated SEQ ID:9158, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51590] Another function of GAM7776 is therefore inhibition of Cytochrome p450, subfamily ivf, polypeptide 3 (leukotriene b4 omega hydroxylase) (CYP4F3, Accession NP_000887.1), a gene which converts leukotriene B4 into the less active 20-hydroxy-leukotriene B4. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CYP4F3.

[51591] The function of CYP4F3 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM67.1.CYP51A1 (Accession NP_000777.1) is another GAM7776 target gene, herein designated TARGET GENE.

CYP51A1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CYP51A1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CYP51A1 BINDING SITE, designated SEQ ID:2152, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51592] Another function of GAM7776 is therefore inhibition of CYP51A1 (Accession NP_000777.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CYP51A1.

[51593] Cytochrome p450, subfamily viiib (sterol 12- α -hydroxylase), polypeptide 1 (CYP8B1, Accession NP_004382.1) is another GAM7776 target gene, herein designated TARGET GENE. CYP8B1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CYP8B1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CYP8B1 BINDING

SITE, designated SEQ ID:5978, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51594] Another function of GAM7776 is therefore inhibition of Cytochrome p450, subfamily viiib (sterol 12- α -hydroxylase), polypeptide 1 (CYP8B1, Accession NP_004382.1), a gene which functions in bile acid biosynthesis. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CYP8B1.

[51595] The function of CYP8B1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM47.1. Debranching enzyme homolog 1 (*S. cerevisiae*) (DBR1, Accession NP_057300.1) is another GAM7776 target gene, herein designated TARGET GENE. DBR1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DBR1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DBR1 BINDING SITE, designated SEQ ID:7961, to the nucleotide sequence of GAM7776 RNA, herein designated

GAM RNA, also designated SEQ ID:246.

[51596] Another function of GAM7776 is therefore inhibition of Debranching enzyme homolog 1 (*s. cerevisiae*) (DBR1, Accession NP_057300.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DBR1.

[51597] Doublecortex; lissencephaly, x-linked (doublecortin) (DCX, Accession NP_835365.1) is another GAM7776 target gene, herein designated TARGET GENE. DCX BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by DCX, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DCX BINDING SITE, designated SEQ ID:16590, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51598] Another function of GAM7776 is therefore inhibition of Doublecortex; lissencephaly, x-linked (doublecortin) (DCX, Accession NP_835365.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DCX.

[51599] Doublecortex; lissencephaly, x-linked (doublecortin)

(DCX, Accession NP_000546.2) is another GAM7776 target gene, herein designated TARGET GENE. DCX BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by DCX, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DCX BINDING SITE, designated SEQ ID:16590, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51600] Another function of GAM7776 is therefore inhibition of Doublecortex; lissencephaly, x-linked (doublecortin) (DCX, Accession NP_000546.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DCX.

[51601] Doublecortex; lissencephaly, x-linked (doublecortin) (DCX, Accession NP_835364.1) is another GAM7776 target gene, herein designated TARGET GENE. DCX BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by DCX, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide se-

quences of DCX BINDING SITE, designated SEQ ID:16590, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51602] Another function of GAM7776 is therefore inhibition of Doublecortex; lissencephaly, x-linked (doublecortin) (DCX, Accession NP_835364.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DCX.

[51603] Doublecortex; lissencephaly, x-linked (doublecortin) (DCX, Accession NP_835366.1) is another GAM7776 target gene, herein designated TARGET GENE. DCX BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by DCX, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DCX BINDING SITE, designated SEQ ID:16590, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51604] Another function of GAM7776 is therefore inhibition of Doublecortex; lissencephaly, x-linked (doublecortin) (DCX, Accession NP_835366.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of

diseases and clinical conditions associated with DCX.

[51605] Desmin (DES, Accession NP_001918.2) is another GAM7776 target gene, herein designated TARGET GENE. DES BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DES, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DES BINDING SITE, designated SEQ ID:14498, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51606] Another function of GAM7776 is therefore inhibition of Desmin (DES, Accession NP_001918.2). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DES.

[51607] Dna fragmentation factor, 40kda, beta polypeptide (caspase-activated dnase) (DFFB, Accession NP_004393.1) is another GAM7776 target gene, herein designated TARGET GENE. DFFB BINDING SITE1 and DFFB BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by DFFB, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING

SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DFFB BINDING SITE1 and DFFB BINDING SITE2, designated SEQ ID:9091 and SEQ ID:2019 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

- [51608] Another function of GAM7776 is therefore inhibition of Dna fragmentation factor, 40kda, beta polypeptide (caspase-activated dnase) (DFFB, Accession NP_004393.1), a gene which induces DNA fragmentation and chromatin condensation during apoptosis. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DFFB.
- [51609] The function of DFFB and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM130.1. Dihydrofolate reductase (DHFR, Accession NP_000782.1) is another GAM7776 target gene, herein designated TARGET GENE. DHFR BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DHFR, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III

of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DHFR BINDING SITE, designated SEQ ID:8052, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51610] Another function of GAM7776 is therefore inhibition of Dihydrofolate reductase (DHFR, Accession NP_000782.1), a gene which converts dihydrofolate into tetrahydrofolate. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DHFR.

[51611] The function of DHFR and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM64.1. Diaphanous homolog 2 (drosophila) (DIAPH2, Accession NP_006720.1) is another GAM7776 target gene, herein designated TARGET GENE. DIAPH2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by DIAPH2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DIAPH2 BINDING SITE, designated SEQ ID:14492, to the

nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51612] Another function of GAM7776 is therefore inhibition of Diaphanous homolog 2 (drosophila) (DIAPH2, Accession NP_006720.1), a gene which may affect in oogenesis and therefore may be associated with Premature ovarian failure . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Premature ovarian failure ., and of other diseases and clinical conditions associated with DIAPH2.

[51613] The function of DIAPH2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM66.1. Disrupted in schizophrenia 1 (DISC1, Accession NP_061132.1) is another GAM7776 target gene, herein designated TARGET GENE. DISC1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DISC1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DISC1 BINDING SITE, designated SEQ ID:1298, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also design-

nated SEQ ID:246.

[51614] Another function of GAM7776 is therefore inhibition of Disrupted in schizophrenia 1 (DISC1, Accession NP_061132.1), a gene which has globular N- terminal domain(s) and a helical C- terminal domain. and therefore may be associated with Schizophrenia . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Schizophrenia ., and of other diseases and clinical conditions associated with DISC1.

[51615] The function of DISC1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM116.1.DKFZP434B1727 (Accession NP_115519.1) is another GAM7776 target gene, herein designated TARGET GENE. DKFZP434B1727 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZP434B1727, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP434B1727 BINDING SITE, designated SEQ ID:4014, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51616] Another function of GAM7776 is therefore inhibition of DKFZP434B1727 (Accession NP_115519.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZP434B1727.

[51617] DKFZp434C0923 (Accession NP_060068.1) is another GAM7776 target gene, herein designated TARGET GENE. DKFZp434C0923 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZp434C0923, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp434C0923 BINDING SITE, designated SEQ ID:8235, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51618] Another function of GAM7776 is therefore inhibition of DKFZp434C0923 (Accession NP_060068.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp434C0923.

[51619] DKFZP434C212 (Accession XP_044196.3) is another GAM7776 target gene, herein designated TARGET GENE.

DKFZP434C212 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZP434C212, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP434C212 BINDING SITE, designated SEQ ID:8661, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51620] Another function of GAM7776 is therefore inhibition of DKFZP434C212 (Accession XP_044196.3) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZP434C212.

[51621] DKFZP434D146 (Accession NP_056410.2) is another GAM7776 target gene, herein designated TARGET GENE. DKFZP434D146 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZP434D146, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP434D146 BINDING SITE, designated SEQ ID:2209, to the nucleotide sequence of

GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51622] Another function of GAM7776 is therefore inhibition of DKFZP434D146 (Accession NP_056410.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZP434D146.

[51623] DKFZp434E2220 (Accession NP_060082.1) is another GAM7776 target gene, herein designated TARGET GENE. DKFZp434E2220 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by DKFZp434E2220, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp434E2220 BINDING SITE, designated SEQ ID:11326, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51624] Another function of GAM7776 is therefore inhibition of DKFZp434E2220 (Accession NP_060082.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp434E2220.

[51625] DKFZP434F0318 (Accession NP_110444.1) is another GAM7776 target gene, herein designated TARGET GENE. DKFZP434F0318 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZP434F0318, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP434F0318 BINDING SITE, designated SEQ ID:16771, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51626] Another function of GAM7776 is therefore inhibition of DKFZP434F0318 (Accession NP_110444.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZP434F0318.

[51627] DKFZp434F1719 (Accession NP_115624.1) is another GAM7776 target gene, herein designated TARGET GENE. DKFZp434F1719 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZp434F1719, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the

nucleotide sequences of DKFZp434F1719 BINDING SITE, designated SEQ ID:3951, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51628] Another function of GAM7776 is therefore inhibition of DKFZp434F1719 (Accession NP_115624.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp434F1719.

[51629] DKFZp434K1210 (Accession NP_060076.1) is another GAM7776 target gene, herein designated TARGET GENE. DKFZp434K1210 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZp434K1210, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp434K1210 BINDING SITE, designated SEQ ID:4195, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51630] Another function of GAM7776 is therefore inhibition of DKFZp434K1210 (Accession NP_060076.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and

treatment of diseases and clinical conditions associated with DKFZp434K1210.

[51631] DKFZp547H025 (Accession NP_064546.1) is another GAM7776 target gene, herein designated TARGET GENE. DKFZp547H025 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZp547H025, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp547H025 BINDING SITE, designated SEQ ID:14246, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51632] Another function of GAM7776 is therefore inhibition of DKFZp547H025 (Accession NP_064546.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp547H025.

[51633] DKFZp547P234 (Accession NP_694590.1) is another GAM7776 target gene, herein designated TARGET GENE. DKFZp547P234 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZp547P234, corresponding to a target binding site

such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp547P234 BINDING SITE, designated SEQ ID:11057, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51634] Another function of GAM7776 is therefore inhibition of DKFZp547P234 (Accession NP_694590.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp547P234.

[51635] DKFZP564G092 (Accession NP_056416.1) is another GAM7776 target gene, herein designated TARGET GENE. DKFZP564G092 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by DKFZP564G092, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP564G092 BINDING SITE, designated SEQ ID:2662, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51636] Another function of GAM7776 is therefore inhibition of

DKFZP564G092 (Accession NP_056416.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZP564G092.

[51637] DKFZP564I122 (Accession XP_032397.1) is another GAM7776 target gene, herein designated TARGET GENE. DKFZP564I122 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZP564I122, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP564I122 BINDING SITE, designated SEQ ID:16590, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51638] Another function of GAM7776 is therefore inhibition of DKFZP564I122 (Accession XP_032397.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZP564I122.

[51639] DKFZP564K0322 (Accession NP_114429.1) is another GAM7776 target gene, herein designated TARGET GENE. DKFZP564K0322 BINDING SITE is a target binding site

found in the 3' untranslated region of mRNA encoded by DKFZP564K0322, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP564K0322 BINDING SITE, designated SEQ ID:17964, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51640] Another function of GAM7776 is therefore inhibition of DKFZP564K0322 (Accession NP_114429.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZP564K0322.

[51641] DKFZp564K142 (Accession NP_115497.2) is another GAM7776 target gene, herein designated TARGET GENE. DKFZp564K142 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZp564K142, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp564K142 BINDING SITE, designated SEQ ID:2663, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also design-

nated SEQ ID:246.

[51642] Another function of GAM7776 is therefore inhibition of DKFZp564K142 (Accession NP_115497.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp564K142.

[51643] DKFZP564O0523 (Accession NP_115496.1) is another GAM7776 target gene, herein designated TARGET GENE. DKFZP564O0523 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZP564O0523, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP564O0523 BINDING SITE, designated SEQ ID:3686, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51644] Another function of GAM7776 is therefore inhibition of DKFZP564O0523 (Accession NP_115496.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZP564O0523.

[51645] DKFZP566D1346 (Accession NP_110443.1) is another

GAM7776 target gene, herein designated TARGET GENE. DKFZP566D1346 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by DKFZP566D1346, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP566D1346 BINDING SITE, designated SEQ ID:10539, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51646] Another function of GAM7776 is therefore inhibition of DKFZP566D1346 (Accession NP_110443.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZP566D1346.

[51647] DKFZP566I1024 (Accession NP_056226.1) is another GAM7776 target gene, herein designated TARGET GENE. DKFZP566I1024 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZP566I1024, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP566I1024 BINDING SITE,

designated SEQ ID:12353, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51648] Another function of GAM7776 is therefore inhibition of DKFZP56611024 (Accession NP_056226.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZP56611024.

[51649] DKFZp586C0721 (Accession XP_098416.1) is another GAM7776 target gene, herein designated TARGET GENE. DKFZp586C0721 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZp586C0721, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp586C0721 BINDING SITE, designated SEQ ID:12173, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51650] Another function of GAM7776 is therefore inhibition of DKFZp586C0721 (Accession XP_098416.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated

with DKFZp586C0721.

[51651] DKFZP586D0919 (Accession NP_056248.1) is another GAM7776 target gene, herein designated TARGET GENE. DKFZP586D0919 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZP586D0919, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP586D0919 BINDING SITE, designated SEQ ID:11134, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51652] Another function of GAM7776 is therefore inhibition of DKFZP586D0919 (Accession NP_056248.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZP586D0919.

[51653] DKFZp667B1218 (Accession NP_808881.1) is another GAM7776 target gene, herein designated TARGET GENE. DKFZp667B1218 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZp667B1218, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III

of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp667B1218 BINDING SITE, designated SEQ ID:15574, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51654] Another function of GAM7776 is therefore inhibition of DKFZp667B1218 (Accession NP_808881.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp667B1218.

[51655] DKFZp667E0512 (Accession XP_117353.1) is another GAM7776 target gene, herein designated TARGET GENE. DKFZp667E0512 BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by DKFZp667E0512, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp667E0512 BINDING SITE, designated SEQ ID:8492, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51656] Another function of GAM7776 is therefore inhibition of DKFZp667E0512 (Accession XP_117353.1) . Accordingly,

utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp667E0512.

[51657] DKFZp761B107 (Accession NP_775734.1) is another GAM7776 target gene, herein designated TARGET GENE. DKFZp761B107 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZp761B107, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp761B107 BINDING SITE, designated SEQ ID:13571, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51658] Another function of GAM7776 is therefore inhibition of DKFZp761B107 (Accession NP_775734.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp761B107.

[51659] DKFZp761B128 (Accession NP_689650.1) is another GAM7776 target gene, herein designated TARGET GENE. DKFZp761B128 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by

DKFZp761B128, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp761B128 BINDING SITE, designated SEQ ID:17969, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51660] Another function of GAM7776 is therefore inhibition of DKFZp761B128 (Accession NP_689650.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp761B128.

[51661] DKFZp761G2113 (Accession XP_046017.3) is another GAM7776 target gene, herein designated TARGET GENE. DKFZp761G2113 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZp761G2113, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp761G2113 BINDING SITE, designated SEQ ID:7769, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51662] Another function of GAM7776 is therefore inhibition of DKFZp761G2113 (Accession XP_046017.3) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp761G2113.

[51663] DKFZp761H039 (Accession NP_061181.1) is another GAM7776 target gene, herein designated TARGET GENE. DKFZp761H039 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZp761H039, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp761H039 BINDING SITE, designated SEQ ID:15190, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51664] Another function of GAM7776 is therefore inhibition of DKFZp761H039 (Accession NP_061181.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp761H039.

[51665] DKFZp761J139 (Accession NP_115656.1) is another GAM7776 target gene, herein designated TARGET GENE.

DKFZp761J139 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by DKFZp761J139, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp761J139 BINDING SITE, designated SEQ ID:5768, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51666] Another function of GAM7776 is therefore inhibition of DKFZp761J139 (Accession NP_115656.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp761J139.

[51667] DKFZp761K1423 (Accession NP_060892.1) is another GAM7776 target gene, herein designated TARGET GENE. DKFZp761K1423 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by DKFZp761K1423, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp761K1423 BINDING SITE, designated SEQ ID:1317, to the nucleotide sequence of

GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51668] Another function of GAM7776 is therefore inhibition of DKFZp761K1423 (Accession NP_060892.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp761K1423.

[51669] DKFZp761N1114 (Accession XP_086327.6) is another GAM7776 target gene, herein designated TARGET GENE. DKFZp761N1114 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZp761N1114, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp761N1114 BINDING SITE, designated SEQ ID:13529, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51670] Another function of GAM7776 is therefore inhibition of DKFZp761N1114 (Accession XP_086327.6) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp761N1114.

[51671] DKFZp761O0113 (Accession NP_060879.1) is another GAM7776 target gene, herein designated TARGET GENE. DKFZp761O0113 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by DKFZp761O0113, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp761O0113 BINDING SITE, designated SEQ ID:7699, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51672] Another function of GAM7776 is therefore inhibition of DKFZp761O0113 (Accession NP_060879.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp761O0113.

[51673] DKFZp761P1121 (Accession NP_690870.1) is another GAM7776 target gene, herein designated TARGET GENE. DKFZp761P1121 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZp761P1121, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the

nucleotide sequences of DKFZp761P1121 BINDING SITE, designated SEQ ID:9147, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51674] Another function of GAM7776 is therefore inhibition of DKFZp761P1121 (Accession NP_690870.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp761P1121.

[51675] DKFZp762C2414 (Accession NP_848637.1) is another GAM7776 target gene, herein designated TARGET GENE. DKFZp762C2414 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZp762C2414, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp762C2414 BINDING SITE, designated SEQ ID:4056, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51676] Another function of GAM7776 is therefore inhibition of DKFZp762C2414 (Accession NP_848637.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and

treatment of diseases and clinical conditions associated with DKFZp762C2414.

[51677] DKFZp762I137 (Accession NP_689624.1) is another GAM7776 target gene, herein designated TARGET GENE. DKFZp762I137 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZp762I137, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp762I137 BINDING SITE, designated SEQ ID:1744, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51678] Another function of GAM7776 is therefore inhibition of DKFZp762I137 (Accession NP_689624.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp762I137.

[51679] DKFZp762I194 (Accession NP_689597.1) is another GAM7776 target gene, herein designated TARGET GENE. DKFZp762I194 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZp762I194, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp762I194 BINDING SITE, designated SEQ ID:6884, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51680] Another function of GAM7776 is therefore inhibition of DKFZp762I194 (Accession NP_689597.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp762I194.

[51681] DKFZp762L0311 (Accession NP_061189.2) is another GAM7776 target gene, herein designated TARGET GENE. DKFZp762L0311 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZp762L0311, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp762L0311 BINDING SITE, designated SEQ ID:9194, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51682] Another function of GAM7776 is therefore inhibition of

DKFZp762L0311 (Accession NP_061189.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp762L0311.

[51683] Dickkopf homolog 3 (xenopus laevis) (DKK3, Accession NP_037385.1) is another GAM7776 target gene, herein designated TARGET GENE. DKK3 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by DKK3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKK3 BINDING SITE, designated SEQ ID:20069, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51684] Another function of GAM7776 is therefore inhibition of Dickkopf homolog 3 (xenopus laevis) (DKK3, Accession NP_037385.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKK3.

[51685] Dickkopf homolog 3 (xenopus laevis) (DKK3, Accession NP_056965.2) is another GAM7776 target gene, herein designated TARGET GENE. DKK3 BINDING SITE is a target

binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by DKK3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKK3 BINDING SITE, designated SEQ ID:20069, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51686] Another function of GAM7776 is therefore inhibition of Dickkopf homolog 3 (*xenopus laevis*) (DKK3, Accession NP_056965.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKK3.

[51687] Dynein, axonemal, heavy polypeptide 11 (DNAH11, Accession NP_003768.1) is another GAM7776 target gene, herein designated TARGET GENE. DNAH11 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DNAH11, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DNAH11 BINDING SITE, designated SEQ ID:1214, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA,

also designated SEQ ID:246.

[51688] Another function of GAM7776 is therefore inhibition of Dynein, axonemal, heavy polypeptide 11 (DNAH11, Accession NP_003768.1), a gene which may function as a motor protein. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DNAH11.

[51689] The function of DNAH11 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1.Dnaj (hsp40) homolog, subfamily b, member 5 (DNAJB5, Accession NP_036398.2) is another GAM7776 target gene, herein designated TARGET GENE. DNAJB5 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DNAJB5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DNAJB5 BINDING SITE, designated SEQ ID:5815, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51690] Another function of GAM7776 is therefore inhibition of Dnaj (hsp40) homolog, subfamily b, member 5 (DNAJB5,

Accession NP_036398.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DNAJB5.

[51691] DRIM (Accession NP_055318.1) is another GAM7776 target gene, herein designated TARGET GENE. DRIM BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DRIM, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DRIM BINDING SITE, designated SEQ ID:6633, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51692] Another function of GAM7776 is therefore inhibition of DRIM (Accession NP_055318.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DRIM.

[51693] Dentatorubral-pallidoluysian atrophy (atrophin-1) (DRPLA, Accession NP_001931.1) is another GAM7776 target gene, herein designated TARGET GENE. DRPLA BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by DRPLA, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BIND-

ING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DRPLA BINDING SITE, designated SEQ ID:9796, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51694] Another function of GAM7776 is therefore inhibition of Dentatorubral-pallidoluysian atrophy (atrophin-1) (DRPLA, Accession NP_001931.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DRPLA.

[51695] Desmocollin 3 (DSC3, Accession NP_077741.1) is another GAM7776 target gene, herein designated TARGET GENE. DSC3 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by DSC3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DSC3 BINDING SITE, designated SEQ ID:7559, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51696] Another function of GAM7776 is therefore inhibition of Desmocollin 3 (DSC3, Accession NP_077741.1), a gene

which is a component of intercellular desmosome junctions. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DSC3.

[51697] The function of DSC3 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1. Desmocollin 3 (DSC3, Accession NP_001932.1) is another GAM7776 target gene, herein designated TARGET GENE. DSC3 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by DSC3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DSC3 BINDING SITE, designated SEQ ID:7559, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51698] Another function of GAM7776 is therefore inhibition of Desmocollin 3 (DSC3, Accession NP_001932.1), a gene which is a component of intercellular desmosome junctions. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical condi-

tions associated with DSC3.

[51699] The function of DSC3 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1. Down syndrome critical region gene 6 (DSCR6, Accession NP_061835.1) is another GAM7776 target gene, herein designated TARGET GENE. DSCR6 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DSCR6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DSCR6 BINDING SITE, designated SEQ ID:14954, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51700] Another function of GAM7776 is therefore inhibition of Down syndrome critical region gene 6 (DSCR6, Accession NP_061835.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DSCR6.

[51701] Dual specificity phosphatase 19 (DUSP19, Accession NP_543152.1) is another GAM7776 target gene, herein designated TARGET GENE. DUSP19 BINDING SITE1 and

DUSP19 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by DUSP19, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DUSP19 BINDING SITE1 and DUSP19 BINDING SITE2, designated SEQ ID:15367 and SEQ ID:5768 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51702] Another function of GAM7776 is therefore inhibition of Dual specificity phosphatase 19 (DUSP19, Accession NP_543152.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DUSP19.

[51703] Endometrial bleeding associated factor (left-right determination, factor a; transforming growth factor beta superfamily) (EBAF, Accession NP_003231.2) is another GAM7776 target gene, herein designated TARGET GENE. EBAF BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by EBAF, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

EBAF BINDING SITE, designated SEQ ID:18275, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51704] Another function of GAM7776 is therefore inhibition of Endometrial bleeding associated factor (left-right determination, factor a; transforming growth factor beta superfamily) (EBAF, Accession NP_003231.2), a gene which LEFT- RIGHT AXIS MALFORMATIONS and therefore is associated with Left- right axis malformations. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Left- right axis malformations, and of other diseases and clinical conditions associated with EBAF.

[51705] The function of EBAF and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1. Endothelial differentiation, sphingolipid g-protein-coupled receptor, 8 (EDG8, Accession NP_110387.1) is another GAM7776 target gene, herein designated TARGET GENE. EDG8 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by EDG8, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the

nucleotide sequences of EDG8 BINDING SITE, designated SEQ ID:12263, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51706] Another function of GAM7776 is therefore inhibition of Endothelial differentiation, sphingolipid g-protein-coupled receptor, 8 (EDG8, Accession NP_110387.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with EDG8.

[51707] EEF2K (Accession NP_037434.1) is another GAM7776 target gene, herein designated TARGET GENE. EEF2K BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by EEF2K, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of EEF2K BINDING SITE, designated SEQ ID:2595, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51708] Another function of GAM7776 is therefore inhibition of EEF2K (Accession NP_037434.1), a gene which phosphorylates serine or threonine on the eukaryotic elongation

factor- 2 and therefore may be associated with Systemic lupus erythematosus and cancer. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Systemic lupus erythematosus and cancer, and of other diseases and clinical conditions associated with EEF2K.

[51709] The function of EEF2K and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1.Eh-domain containing 1 (EHD1, Accession NP_006786.2) is another GAM7776 target gene, herein designated TARGET GENE. EHD1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by EHD1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of EHD1 BINDING SITE, designated SEQ ID:7065, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51710] Another function of GAM7776 is therefore inhibition of Eh-domain containing 1 (EHD1, Accession NP_006786.2), a gene which may be involved in ligand- initiated endocytosis. Accordingly, utilities of GAM7776 include diagnosis,

prevention and treatment of diseases and clinical conditions associated with EHD1.

[51711] The function of EHD1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM65.1.Eh-domain containing 2 (EHD2, Accession NP_055416.2) is another GAM7776 target gene, herein designated TARGET GENE. EHD2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by EHD2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of EHD2 BINDING SITE, designated SEQ ID:4837, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51712] Another function of GAM7776 is therefore inhibition of Eh-domain containing 2 (EHD2, Accession NP_055416.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with EHD2.

[51713] Eukaryotic translation initiation factor 2, subunit 3 gamma, 52kda (EIF2S3, Accession NP_001406.1) is an-

other GAM7776 target gene, herein designated TARGET GENE. EIF2S3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by EIF2S3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of EIF2S3 BINDING SITE, designated SEQ ID:1744, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51714] Another function of GAM7776 is therefore inhibition of Eukaryotic translation initiation factor 2, subunit 3 gamma, 52kda (EIF2S3, Accession NP_001406.1), a gene which functions in the early steps of protein synthesis. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with EIF2S3.

[51715] The function of EIF2S3 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1. Eukaryotic translation initiation factor 5a2 (EIF5A2, Accession NP_065123.1) is another GAM7776 target gene, herein designated TARGET GENE. EIF5A2 BINDING SITE is a target binding site found in the 3' un-

translated region of mRNA encoded by EIF5A2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of EIF5A2 BINDING SITE, designated SEQ ID:8340, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51716] Another function of GAM7776 is therefore inhibition of Eukaryotic translation initiation factor 5a2 (EIF5A2, Accession NP_065123.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with EIF5A2.

[51717] ELP3 (Accession NP_060561.3) is another GAM7776 target gene, herein designated TARGET GENE. ELP3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ELP3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ELP3 BINDING SITE, designated SEQ ID:14236, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51718] Another function of GAM7776 is therefore inhibition of

ELP3 (Accession NP_060561.3) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ELP3.

[51719] Egf-like module containing, mucin-like, hormone receptor-like sequence 2 (EMR2, Accession NP_690880.1) is another GAM7776 target gene, herein designated TARGET GENE. EMR2 BINDING SITE1 and EMR2 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by EMR2, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of EMR2 BINDING SITE1 and EMR2 BINDING SITE2, designated SEQ ID:13462 and SEQ ID:17743 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51720] Another function of GAM7776 is therefore inhibition of Egf-like module containing, mucin-like, hormone receptor-like sequence 2 (EMR2, Accession NP_690880.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with EMR2.

[51721] Egf-like module containing, mucin-like, hormone recep-

tor-like sequence 2 (EMR2, Accession NP_690880.1) is another GAM7776 target gene, herein designated TARGET GENE. EMR2 BINDING SITE1 and EMR2 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by EMR2, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of EMR2 BINDING SITE1 and EMR2 BINDING SITE2, designated SEQ ID:17743 and SEQ ID:17743 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51722] Another function of GAM7776 is therefore inhibition of Egf-like module containing, mucin-like, hormone receptor-like sequence 2 (EMR2, Accession NP_690880.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with EMR2.

[51723] Egf-like module containing, mucin-like, hormone receptor-like sequence 2 (EMR2, Accession NP_690882.1) is another GAM7776 target gene, herein designated TARGET GENE. EMR2 BINDING SITE1 and EMR2 BINDING SITE2 are target binding sites found in untranslated regions of mul-

multiple transcripts of mRNA encoded by EMR2, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of EMR2 BINDING SITE1 and EMR2 BINDING SITE2, designated SEQ ID:13462 and SEQ ID:13462 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51724] Another function of GAM7776 is therefore inhibition of Egf-like module containing, mucin-like, hormone receptor-like sequence 2 (EMR2, Accession NP_690882.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with EMR2.

[51725] Egf-like module containing, mucin-like, hormone receptor-like sequence 2 (EMR2, Accession NP_690881.1) is another GAM7776 target gene, herein designated TARGET GENE. EMR2 BINDING SITE1 and EMR2 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by EMR2, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of EMR2

BINDING SITE1 and EMR2 BINDING SITE2, designated SEQ ID:13462 and SEQ ID:17743 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51726] Another function of GAM7776 is therefore inhibition of Egf-like module containing, mucin-like, hormone receptor-like sequence 2 (EMR2, Accession NP_690881.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with EMR2.

[51727] Egf-like module containing, mucin-like, hormone receptor-like sequence 2 (EMR2, Accession NP_690885.1) is another GAM7776 target gene, herein designated TARGET GENE. EMR2 BINDING SITE1 and EMR2 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by EMR2, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of EMR2 BINDING SITE1 and EMR2 BINDING SITE2, designated SEQ ID:13462 and SEQ ID:17743 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51728] Another function of GAM7776 is therefore inhibition of Egf-like module containing, mucin-like, hormone receptor-like sequence 2 (EMR2, Accession NP_690885.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with EMR2.

[51729] Egf-like module containing, mucin-like, hormone receptor-like sequence 2 (EMR2, Accession NP_038475.2) is another GAM7776 target gene, herein designated TARGET GENE. EMR2 BINDING SITE1 and EMR2 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by EMR2, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of EMR2 BINDING SITE1 and EMR2 BINDING SITE2, designated SEQ ID:13462 and SEQ ID:13462 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51730] Another function of GAM7776 is therefore inhibition of Egf-like module containing, mucin-like, hormone receptor-like sequence 2 (EMR2, Accession NP_038475.2) . Accordingly, utilities of GAM7776 include diagnosis, preven-

tion and treatment of diseases and clinical conditions associated with EMR2.

[51731] Egf-like module containing, mucin-like, hormone receptor-like sequence 2 (EMR2, Accession NP_690881.1) is another GAM7776 target gene, herein designated TARGET GENE. EMR2 BINDING SITE1 and EMR2 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by EMR2, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of EMR2 BINDING SITE1 and EMR2 BINDING SITE2, designated SEQ ID:17743 and SEQ ID:17743 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51732] Another function of GAM7776 is therefore inhibition of Egf-like module containing, mucin-like, hormone receptor-like sequence 2 (EMR2, Accession NP_690881.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with EMR2.

[51733] Endonuclease g-like 1 (ENDOGL1, Accession NP_005098.1) is another GAM7776 target gene, herein

designated TARGET GENE. ENDOGL1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ENDOGL1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ENDOGL1 BINDING SITE, designated SEQ ID:5031, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51734] Another function of GAM7776 is therefore inhibition of Endonuclease g-like 1 (ENDOGL1, Accession NP_005098.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ENDOGL1.

[51735] Epha8 (EPA8, Accession NP_065387.1) is another GAM7776 target gene, herein designated TARGET GENE. EPA8 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by EPA8, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of EPA8 BINDING SITE, designated SEQ ID:1229, to the nucleotide sequence of GAM7776 RNA, herein designated

GAM RNA, also designated SEQ ID:246.

[51736] Another function of GAM7776 is therefore inhibition of EphA8 (EPHA8, Accession NP_065387.1), a gene which Eph- related receptor tyrosine kinase A8. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with EPHA8.

[51737] The function of EPHA8 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1. Epieregulin (EREG, Accession NP_001423.1) is another GAM7776 target gene, herein designated TARGET GENE. EREG BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by EREG, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of EREG BINDING SITE, designated SEQ ID:17956, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51738] Another function of GAM7776 is therefore inhibition of Epieregulin (EREG, Accession NP_001423.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and

treatment of diseases and clinical conditions associated with EREG.

[51739] Ellis van creveld syndrome (EVC, Accession NP_714928.1) is another GAM7776 target gene, herein designated TARGET GENE. EVC BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by EVC, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of EVC BINDING SITE, designated SEQ ID:18115, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51740] Another function of GAM7776 is therefore inhibition of Ellis van creveld syndrome (EVC, Accession NP_714928.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with EVC.

[51741] Ellis van creveld syndrome (EVC, Accession NP_055371.1) is another GAM7776 target gene, herein designated TARGET GENE. EVC BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by EVC, corresponding to a target binding

site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of EVC BINDING SITE, designated SEQ ID:18115, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51742] Another function of GAM7776 is therefore inhibition of Ellis van creveld syndrome (EVC, Accession NP_055371.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with EVC.

[51743] Ecotropic viral integration site 5 (EVI5, Accession NP_005656.2) is another GAM7776 target gene, herein designated TARGET GENE. EVI5 BINDING SITE1 and EVI5 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by EVI5, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of EVI5 BINDING SITE1 and EVI5 BINDING SITE2, designated SEQ ID:7219 and SEQ ID:11607 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51744] Another function of GAM7776 is therefore inhibition of Ecotropic viral integration site 5 (EVI5, Accession NP_005656.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with EVI5.

[51745] Enhancer of zeste homolog 1 (drosophila) (EZH1, Accession NP_001982.2) is another GAM7776 target gene, herein designated TARGET GENE. EZH1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by EZH1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of EZH1 BINDING SITE, designated SEQ ID:14083, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51746] Another function of GAM7776 is therefore inhibition of Enhancer of zeste homolog 1 (drosophila) (EZH1, Accession NP_001982.2), a gene which may act in transcriptional regulation and heterochromatin maintenance. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with EZH1.

[51747] The function of EZH1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1.F11R (Accession NP_653086.1) is another GAM7776 target gene, herein designated TARGET GENE. F11R BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by F11R, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of F11R BINDING SITE, designated SEQ ID:2664, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51748] Another function of GAM7776 is therefore inhibition of F11R (Accession NP_653086.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with F11R.

[51749] F11R (Accession NP_058642.1) is another GAM7776 target gene, herein designated TARGET GENE. F11R BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by F11R, corresponding to a target binding site such as BINDING

SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of F11R BINDING SITE, designated SEQ ID:2664, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51750] Another function of GAM7776 is therefore inhibition of F11R (Accession NP_058642.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with F11R.

[51751] F11R (Accession NP_653085.1) is another GAM7776 target gene, herein designated TARGET GENE. F11R BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by F11R, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of F11R BINDING SITE, designated SEQ ID:2664, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51752] Another function of GAM7776 is therefore inhibition of F11R (Accession NP_653085.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with F11R.

[51753] F11R (Accession NP_653087.1) is another GAM7776 target gene, herein designated TARGET GENE. F11R BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by F11R, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of F11R BINDING SITE, designated SEQ ID:2664, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51754] Another function of GAM7776 is therefore inhibition of F11R (Accession NP_653087.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with F11R.

[51755] Coagulation factor ii (thrombin) receptor-like 3 (F2RL3, Accession NP_003941.1) is another GAM7776 target gene, herein designated TARGET GENE. F2RL3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by F2RL3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of F2RL3 BINDING SITE, designated SEQ ID:4234, to the nucleotide sequence of

GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51756] Another function of GAM7776 is therefore inhibition of Coagulation factor ii (thrombin) receptor-like 3 (F2RL3, Accession NP_003941.1), a gene which Protease- activated receptor 4; G protein- coupled receptor that increases phosphoinositide hydrolysis. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with F2RL3.

[51757] The function of F2RL3 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM72.1.Coagulation factor iii (thromboplastin, tissue factor) (F3, Accession NP_001984.1) is another GAM7776 target gene, herein designated TARGET GENE. F3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by F3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of F3 BINDING SITE, designated SEQ ID:18492, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51758] Another function of GAM7776 is therefore inhibition of Coagulation factor iii (thromboplastin, tissue factor) (F3, Accession NP_001984.1), a gene which functions in normal hemostasis. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with F3.

[51759] The function of F3 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM136.1. Coagulation factor v (proaccelerin, labile factor) (F5, Accession NP_000121.1) is another GAM7776 target gene, herein designated TARGET GENE. F5 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by F5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of F5 BINDING SITE, designated SEQ ID:7269, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51760] Another function of GAM7776 is therefore inhibition of Coagulation factor v (proaccelerin, labile factor) (F5, Accession NP_000121.1). Accordingly, utilities of GAM7776

include diagnosis, prevention and treatment of diseases and clinical conditions associated with F5.

[51761] Fatty acid binding protein 2, intestinal (FABP2, Accession NP_000125.1) is another GAM7776 target gene, herein designated TARGET GENE. FABP2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FABP2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FABP2 BINDING SITE, designated SEQ ID:2195, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51762] Another function of GAM7776 is therefore inhibition of Fatty acid binding protein 2, intestinal (FABP2, Accession NP_000125.1), a gene which may have a role in dietary fat uptake or processing. and therefore may be associated with Cardiovascular disease and type 2 diabetes. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Cardiovascular disease and type 2 diabetes., and of other diseases and clinical conditions associated with FABP2.

[51763] The function of FABP2 and its association with various

diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1. Fanconi anemia, complementation group e (FANCE, Accession NP_068741.1) is another GAM7776 target gene, herein designated TARGET GENE. FANCE BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FANCE, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FANCE BINDING SITE, designated SEQ ID:5597, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51764] Another function of GAM7776 is therefore inhibition of Fanconi anemia, complementation group e (FANCE, Accession NP_068741.1), a gene which is a possible regulator of lymphocyte and platelet function. and therefore is associated with Fanconi anemia, complementation group e. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Fanconi anemia, complementation group e., and of other diseases and clinical conditions associated with FANCE.

[51765] The function of FANCE and its association with various

diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1. Fanconi anemia, complementation group f (FANCF, Accession NP_073562.1) is another GAM7776 target gene, herein designated TARGET GENE. FANCF BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FANCF, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FANCF BINDING SITE, designated SEQ ID:5816, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51766] Another function of GAM7776 is therefore inhibition of Fanconi anemia, complementation group f (FANCF, Accession NP_073562.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FANCF.

[51767] FAT3 (Accession XP_061871.5) is another GAM7776 target gene, herein designated TARGET GENE. FAT3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FAT3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or

BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FAT3 BINDING SITE, designated SEQ ID:8236, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51768] Another function of GAM7776 is therefore inhibition of FAT3 (Accession XP_061871.5) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FAT3.

[51769] FBXW8 (Accession NP_699179.2) is another GAM7776 target gene, herein designated TARGET GENE. FBXW8 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by FBXW8, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FBXW8 BINDING SITE, designated SEQ ID:11845, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51770] Another function of GAM7776 is therefore inhibition of FBXW8 (Accession NP_699179.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of

diseases and clinical conditions associated with FBXW8.

[51771] FBXW8 (Accession NP_036306.1) is another GAM7776 target gene, herein designated TARGET GENE. FBXW8 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by FBXW8, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FBXW8 BINDING SITE, designated SEQ ID:11845, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51772] Another function of GAM7776 is therefore inhibition of FBXW8 (Accession NP_036306.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FBXW8.

[51773] Fc fragment of iga, receptor for (FCAR, Accession NP_579806.1) is another GAM7776 target gene, herein designated TARGET GENE. FCAR BINDING SITE1 through FCAR BINDING SITE3 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by FCAR, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III

of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FCAR BINDING SITE1 through FCAR BINDING SITE3, designated SEQ ID:10448, SEQ ID:10448 and SEQ ID:10448 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51774] Another function of GAM7776 is therefore inhibition of Fc fragment of iga, receptor for (FCAR, Accession NP_579806.1), a gene which binds to the fc region of immunoglobulins alpha and mediates several functions including cytokine production. and therefore may be associated with Iga nephropathy. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Iga nephropathy., and of other diseases and clinical conditions associated with FCAR.

[51775] The function of FCAR and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM136.1.Fc fragment of iga, receptor for (FCAR, Accession NP_579803.1) is another GAM7776 target gene, herein designated TARGET GENE. FCAR BINDING SITE1 through FCAR BINDING SITE3 are target binding sites found in untranslated regions of multiple transcripts of

mRNA encoded by FCAR, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FCAR BINDING SITE1 through FCAR BINDING SITE3, designated SEQ ID:10448, SEQ ID:10448 and SEQ ID:10448 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51776] Another function of GAM7776 is therefore inhibition of Fc fragment of iga, receptor for (FCAR, Accession NP_579803.1), a gene which binds to the fc region of immunoglobulins alpha and mediates several functions including cytokine production. and therefore may be associated with Iga nephropathy. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Iga nephropathy., and of other diseases and clinical conditions associated with FCAR.

[51777] The function of FCAR and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM136.1.Fc fragment of iga, receptor for (FCAR, Accession NP_579807.1) is another GAM7776 target gene, herein designated TARGET GENE. FCAR BINDING SITE1

through FCAR BINDING SITE3 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by FCAR, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FCAR BINDING SITE1 through FCAR BINDING SITE3, designated SEQ ID:10448, SEQ ID:3819 and SEQ ID:17643 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51778] Another function of GAM7776 is therefore inhibition of Fc fragment of iga, receptor for (FCAR, Accession NP_579807.1), a gene which binds to the fc region of immunoglobulins alpha and mediates several functions including cytokine production. and therefore may be associated with Iga nephropathy. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Iga nephropathy., and of other diseases and clinical conditions associated with FCAR.

[51779] The function of FCAR and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM136.1.Fc fragment of iga, receptor for (FCAR, Ac-

cession NP_579813.1) is another GAM7776 target gene, herein designated TARGET GENE. FCAR BINDING SITE1 through FCAR BINDING SITE3 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by FCAR, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FCAR BINDING SITE1 through FCAR BINDING SITE3, designated SEQ ID:17643, SEQ ID:497 and SEQ ID:11291 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51780] Another function of GAM7776 is therefore inhibition of Fc fragment of iga, receptor for (FCAR, Accession NP_579813.1), a gene which binds to the fc region of immunoglobulins alpha and mediates several functions including cytokine production. and therefore may be associated with Iga nephropathy. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Iga nephropathy., and of other diseases and clinical conditions associated with FCAR.

[51781] The function of FCAR and its association with various diseases and clinical conditions, has been established by

previous studies, as described hereinabove with reference to GAM136.1.Fer-1-like 4 (*c. elegans*) (FER1L4, Accession XP_300246.1) is another GAM7776 target gene, herein designated TARGET GENE. FER1L4 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FER1L4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FER1L4 BINDING SITE, designated SEQ ID:11291, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51782] Another function of GAM7776 is therefore inhibition of Fer-1-like 4 (*c. elegans*) (FER1L4, Accession XP_300246.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FER1L4.

[51783] Fasciculation and elongation protein zeta 1 (zygin i) (FEZ1, Accession NP_072043.1) is another GAM7776 target gene, herein designated TARGET GENE. FEZ1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by FEZ1, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FEZ1 BINDING SITE, designated SEQ ID:5204, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51784] Another function of GAM7776 is therefore inhibition of Fasciculation and elongation protein zeta 1 (zygin i) (FEZ1, Accession NP_072043.1), a gene which Zygin 1; may have a role in axonal outgrowth; has similarity to C. elegans UNC- 76. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FEZ1.

[51785] The function of FEZ1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1.Fibroblast growth factor 5 (FGF5, Accession NP_004455.1) is another GAM7776 target gene, herein designated TARGET GENE. FGF5 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by FGF5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FGF5

BINDING SITE, designated SEQ ID:14382, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51786] Another function of GAM7776 is therefore inhibition of Fibroblast growth factor 5 (FGF5, Accession NP_004455.1), a gene which induces transformation and may regulate neuronal differentiation. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FGF5.

[51787] The function of FGF5 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM106.1. Fibroblast growth factor 5 (FGF5, Accession NP_149134.1) is another GAM7776 target gene, herein designated TARGET GENE. FGF5 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by FGF5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FGF5 BINDING SITE, designated SEQ ID:14382, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51788] Another function of GAM7776 is therefore inhibition of Fibroblast growth factor 5 (FGF5, Accession NP_149134.1), a gene which induces transformation and may regulate neuronal differentiation. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FGF5.

[51789] The function of FGF5 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM106.1. Four and a half lim domains 2 (FHL2, Accession NP_001441.2) is another GAM7776 target gene, herein designated TARGET GENE. FHL2 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FHL2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FHL2 BINDING SITE, designated SEQ ID:16589, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51790] Another function of GAM7776 is therefore inhibition of Four and a half lim domains 2 (FHL2, Accession NP_001441.2), a gene which Contains four LIM domains

and an additional zinc finger. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FHL2.

[51791] The function of FHL2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1.FISH (Accession NP_055446.1) is another GAM7776 target gene, herein designated TARGET GENE. FISH BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FISH, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FISH BINDING SITE, designated SEQ ID:13261, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51792] Another function of GAM7776 is therefore inhibition of FISH (Accession NP_055446.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FISH.

[51793] Fk506 binding protein 9, 63 kda (FKBP9, Accession NP_009201.1) is another GAM7776 target gene, herein designated TARGET GENE. FKBP9 BINDING SITE is a target

binding site found in the 3' untranslated region of mRNA encoded by FKBP9, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FKBP9 BINDING SITE, designated SEQ ID:7851, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51794] Another function of GAM7776 is therefore inhibition of Fk506 binding protein 9, 63 kda (FKBP9, Accession NP_009201.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FKBP9.

[51795] FLJ00001 (Accession XP_088525.2) is another GAM7776 target gene, herein designated TARGET GENE. FLJ00001 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ00001, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ00001 BINDING SITE, designated SEQ ID:14844, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51796] Another function of GAM7776 is therefore inhibition of FLJ00001 (Accession XP_088525.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ00001.

[51797] FLJ00060 (Accession XP_028154.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ00060 BINDING SITE is a target binding site found in the 5` un-translated region of mRNA encoded by FLJ00060, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ00060 BINDING SITE, designated SEQ ID:11528, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51798] Another function of GAM7776 is therefore inhibition of FLJ00060 (Accession XP_028154.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ00060.

[51799] FLJ10101 (Accession NP_078994.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ10101 BINDING SITE is a target binding site found in the 3` un-

translated region of mRNA encoded by FLJ10101, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ10101 BINDING SITE, designated SEQ ID:9189, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51800] Another function of GAM7776 is therefore inhibition of FLJ10101 (Accession NP_078994.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ10101.

[51801] FLJ10232 (Accession NP_060503.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ10232 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ10232, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ10232 BINDING SITE, designated SEQ ID:19236, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51802] Another function of GAM7776 is therefore inhibition of

FLJ10232 (Accession NP_060503.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ10232.

[51803] FLJ10298 (Accession NP_060520.2) is another GAM7776 target gene, herein designated TARGET GENE. FLJ10298 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ10298, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ10298 BINDING SITE, designated SEQ ID:2615, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51804] Another function of GAM7776 is therefore inhibition of FLJ10298 (Accession NP_060520.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ10298.

[51805] FLJ10346 (Accession NP_060535.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ10346 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FLJ10346, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ10346 BINDING SITE, designated SEQ ID:19219, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51806] Another function of GAM7776 is therefore inhibition of FLJ10346 (Accession NP_060535.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ10346.

[51807] FLJ10520 (Accession NP_060594.2) is another GAM7776 target gene, herein designated TARGET GENE. FLJ10520 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ10520, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ10520 BINDING SITE, designated SEQ ID:4272, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51808] Another function of GAM7776 is therefore inhibition of FLJ10520 (Accession NP_060594.2) . Accordingly, utilities

of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ10520.

[51809] FLJ10535 (Accession NP_060599.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ10535 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ10535, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ10535 BINDING SITE, designated SEQ ID:9543, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51810] Another function of GAM7776 is therefore inhibition of FLJ10535 (Accession NP_060599.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ10535.

[51811] FLJ10560 (Accession NP_060608.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ10560 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ10560, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ10560 BINDING SITE, designated SEQ ID:15591, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51812] Another function of GAM7776 is therefore inhibition of FLJ10560 (Accession NP_060608.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ10560.

[51813] FLJ10713 (Accession NP_060659.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ10713 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ10713, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ10713 BINDING SITE, designated SEQ ID:7909, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51814] Another function of GAM7776 is therefore inhibition of FLJ10713 (Accession NP_060659.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment

of diseases and clinical conditions associated with FLJ10713.

[51815] FLJ10846 (Accession NP_060711.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ10846 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ10846, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ10846 BINDING SITE, designated SEQ ID:11528, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51816] Another function of GAM7776 is therefore inhibition of FLJ10846 (Accession NP_060711.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ10846.

[51817] FLJ10847 (Accession NP_060712.2) is another GAM7776 target gene, herein designated TARGET GENE. FLJ10847 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ10847, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of FLJ10847 BINDING SITE, designated SEQ ID:19357, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51818] Another function of GAM7776 is therefore inhibition of FLJ10847 (Accession NP_060712.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ10847.

[51819] FLJ10922 (Accession NP_060743.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ10922 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ10922, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ10922 BINDING SITE, designated SEQ ID:18818, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51820] Another function of GAM7776 is therefore inhibition of FLJ10922 (Accession NP_060743.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

FLJ10922.

[51821] FLJ11323 (Accession NP_060860.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ11323 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by FLJ11323, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ11323 BINDING SITE, designated SEQ ID:2044, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51822] Another function of GAM7776 is therefore inhibition of FLJ11323 (Accession NP_060860.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ11323.

[51823] FLJ11467 (Accession NP_079239.2) is another GAM7776 target gene, herein designated TARGET GENE. FLJ11467 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ11467, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of FLJ11467 BINDING SITE, designated SEQ ID:834, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51824] Another function of GAM7776 is therefore inhibition of FLJ11467 (Accession NP_079239.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ11467.

[51825] FLJ11710 (Accession NP_079122.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ11710 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ11710, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ11710 BINDING SITE, designated SEQ ID:9688, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51826] Another function of GAM7776 is therefore inhibition of FLJ11710 (Accession NP_079122.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

FLJ11710.

[51827] FLJ11715 (Accession NP_078840.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ11715 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ11715, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ11715 BINDING SITE, designated SEQ ID:3305, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51828] Another function of GAM7776 is therefore inhibition of FLJ11715 (Accession NP_078840.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ11715.

[51829] FLJ11800 (Accession NP_079250.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ11800 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ11800, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

FLJ11800 BINDING SITE, designated SEQ ID:10847, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51830] Another function of GAM7776 is therefore inhibition of FLJ11800 (Accession NP_079250.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ11800.

[51831] FLJ12076 (Accession NP_079463.2) is another GAM7776 target gene, herein designated TARGET GENE. FLJ12076 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ12076, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ12076 BINDING SITE, designated SEQ ID:8886, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51832] Another function of GAM7776 is therefore inhibition of FLJ12076 (Accession NP_079463.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ12076.

[51833] FLJ12363 (Accession NP_115543.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ12363 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ12363, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ12363 BINDING SITE, designated SEQ ID:17722, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51834] Another function of GAM7776 is therefore inhibition of FLJ12363 (Accession NP_115543.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ12363.

[51835] FLJ12572 (Accession NP_075056.2) is another GAM7776 target gene, herein designated TARGET GENE. FLJ12572 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FLJ12572, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ12572 BINDING SITE, designated SEQ ID:17515, to the

nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51836] Another function of GAM7776 is therefore inhibition of FLJ12572 (Accession NP_075056.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ12572.

[51837] FLJ12586 (Accession NP_078896.2) is another GAM7776 target gene, herein designated TARGET GENE. FLJ12586 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FLJ12586, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ12586 BINDING SITE, designated SEQ ID:10410, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51838] Another function of GAM7776 is therefore inhibition of FLJ12586 (Accession NP_078896.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ12586.

[51839] FLJ12649 (Accession XP_291344.1) is another GAM7776

target gene, herein designated TARGET GENE. FLJ12649 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ12649, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ12649 BINDING SITE, designated SEQ ID:3686, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51840] Another function of GAM7776 is therefore inhibition of FLJ12649 (Accession XP_291344.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ12649.

[51841] FLJ12687 (Accession NP_079193.2) is another GAM7776 target gene, herein designated TARGET GENE. FLJ12687 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ12687, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ12687 BINDING SITE, designated SEQ ID:3324, to the nucleotide sequence of GAM7776 RNA, herein designated

GAM RNA, also designated SEQ ID:246.

[51842] Another function of GAM7776 is therefore inhibition of FLJ12687 (Accession NP_079193.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ12687.

[51843] FLJ12747 (Accession XP_290972.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ12747 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ12747, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ12747 BINDING SITE, designated SEQ ID:10683, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51844] Another function of GAM7776 is therefore inhibition of FLJ12747 (Accession XP_290972.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ12747.

[51845] FLJ12787 (Accession NP_115551.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ12787

BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ12787, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ12787 BINDING SITE, designated SEQ ID:14839, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51846] Another function of GAM7776 is therefore inhibition of FLJ12787 (Accession NP_115551.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ12787.

[51847] FLJ12800 (Accession NP_075054.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ12800 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ12800, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ12800 BINDING SITE, designated SEQ ID:4261, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51848] Another function of GAM7776 is therefore inhibition of FLJ12800 (Accession NP_075054.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ12800.

[51849] FLJ12888 (Accession NP_079221.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ12888 BINDING SITE is a target binding site found in the 3` un-translated region of mRNA encoded by FLJ12888, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ12888 BINDING SITE, designated SEQ ID:17723, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51850] Another function of GAM7776 is therefore inhibition of FLJ12888 (Accession NP_079221.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ12888.

[51851] FLJ12903 (Accession NP_073590.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ12903 BINDING SITE is a target binding site found in the 3` un-

translated region of mRNA encoded by FLJ12903, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ12903 BINDING SITE, designated SEQ ID:10224, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51852] Another function of GAM7776 is therefore inhibition of FLJ12903 (Accession NP_073590.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ12903.

[51853] FLJ12960 (Accession NP_078914.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ12960 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ12960, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ12960 BINDING SITE, designated SEQ ID:11523, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51854] Another function of GAM7776 is therefore inhibition of

FLJ12960 (Accession NP_078914.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ12960.

[51855] FLJ12973 (Accession NP_079184.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ12973 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ12973, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ12973 BINDING SITE, designated SEQ ID:5230, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51856] Another function of GAM7776 is therefore inhibition of FLJ12973 (Accession NP_079184.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ12973.

[51857] FLJ12975 (Accession NP_079085.2) is another GAM7776 target gene, herein designated TARGET GENE. FLJ12975 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ12975, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ12975 BINDING SITE, designated SEQ ID:2409, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51858] Another function of GAM7776 is therefore inhibition of FLJ12975 (Accession NP_079085.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ12975.

[51859] FLJ12986 (Accession XP_290685.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ12986 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ12986, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ12986 BINDING SITE, designated SEQ ID:6037, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51860] Another function of GAM7776 is therefore inhibition of FLJ12986 (Accession XP_290685.1) . Accordingly, utilities

of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ12986.

[51861] FLJ13072 (Accession XP_117117.2) is another GAM7776 target gene, herein designated TARGET GENE. FLJ13072 BINDING SITE1 and FLJ13072 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ13072, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ13072 BINDING SITE1 and FLJ13072 BINDING SITE2, designated SEQ ID:13729 and SEQ ID:2223 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51862] Another function of GAM7776 is therefore inhibition of FLJ13072 (Accession XP_117117.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ13072.

[51863] FLJ13114 (Accession NP_078817.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ13114 BINDING SITE is a target binding site found in the 3' un-

translated region of mRNA encoded by FLJ13114, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ13114 BINDING SITE, designated SEQ ID:11919, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51864] Another function of GAM7776 is therefore inhibition of FLJ13114 (Accession NP_078817.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ13114.

[51865] FLJ13197 (Accession NP_078890.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ13197 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ13197, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ13197 BINDING SITE, designated SEQ ID:8231, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51866] Another function of GAM7776 is therefore inhibition of

FLJ13197 (Accession NP_078890.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ13197.

[51867] FLJ13352 (Accession NP_078868.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ13352 BINDING SITE1 and FLJ13352 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ13352, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ13352 BINDING SITE1 and FLJ13352 BINDING SITE2, designated SEQ ID:10493 and SEQ ID:13318 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51868] Another function of GAM7776 is therefore inhibition of FLJ13352 (Accession NP_078868.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ13352.

[51869] FLJ13456 (Accession XP_038291.5) is another GAM7776 target gene, herein designated TARGET GENE. FLJ13456

BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ13456, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ13456 BINDING SITE, designated SEQ ID:8163, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51870] Another function of GAM7776 is therefore inhibition of FLJ13456 (Accession XP_038291.5) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ13456.

[51871] FLJ13910 (Accession NP_073617.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ13910 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ13910, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ13910 BINDING SITE, designated SEQ ID:7691, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51872] Another function of GAM7776 is therefore inhibition of FLJ13910 (Accession NP_073617.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ13910.

[51873] FLJ13984 (Accession NP_079046.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ13984 BINDING SITE1 and FLJ13984 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ13984, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ13984 BINDING SITE1 and FLJ13984 BINDING SITE2, designated SEQ ID:4819 and SEQ ID:10809 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51874] Another function of GAM7776 is therefore inhibition of FLJ13984 (Accession NP_079046.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ13984.

[51875] FLJ14100 (Accession NP_079301.1) is another GAM7776

target gene, herein designated TARGET GENE. FLJ14100 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ14100, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ14100 BINDING SITE, designated SEQ ID:12143, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51876] Another function of GAM7776 is therefore inhibition of FLJ14100 (Accession NP_079301.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ14100.

[51877] FLJ14260 (Accession NP_079303.2) is another GAM7776 target gene, herein designated TARGET GENE. FLJ14260 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ14260, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ14260 BINDING SITE, designated SEQ ID:921, to the nucleotide sequence of GAM7776 RNA, herein designated

GAM RNA, also designated SEQ ID:246.

[51878] Another function of GAM7776 is therefore inhibition of FLJ14260 (Accession NP_079303.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ14260.

[51879] FLJ14351 (Accession NP_079008.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ14351 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ14351, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ14351 BINDING SITE, designated SEQ ID:8586, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51880] Another function of GAM7776 is therefore inhibition of FLJ14351 (Accession NP_079008.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ14351.

[51881] FLJ14442 (Accession NP_116174.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ14442

BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ14442, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ14442 BINDING SITE, designated SEQ ID:16259, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51882] Another function of GAM7776 is therefore inhibition of FLJ14442 (Accession NP_116174.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ14442.

[51883] FLJ14803 (Accession NP_116231.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ14803 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ14803, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ14803 BINDING SITE, designated SEQ ID:939, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51884] Another function of GAM7776 is therefore inhibition of FLJ14803 (Accession NP_116231.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ14803.

[51885] FLJ14957 (Accession NP_116255.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ14957 BINDING SITE is a target binding site found in the 3` un-translated region of mRNA encoded by FLJ14957, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ14957 BINDING SITE, designated SEQ ID:13527, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51886] Another function of GAM7776 is therefore inhibition of FLJ14957 (Accession NP_116255.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ14957.

[51887] FLJ20045 (Accession NP_060108.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ20045 BINDING SITE is a target binding site found in the 3` un-

translated region of mRNA encoded by FLJ20045, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20045 BINDING SITE, designated SEQ ID:12557, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51888] Another function of GAM7776 is therefore inhibition of FLJ20045 (Accession NP_060108.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20045.

[51889] FLJ20070 (Accession NP_060122.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ20070 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ20070, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20070 BINDING SITE, designated SEQ ID:7530, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51890] Another function of GAM7776 is therefore inhibition of

FLJ20070 (Accession NP_060122.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20070.

[51891] FLJ20079 (Accession NP_060126.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ20079 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ20079, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20079 BINDING SITE, designated SEQ ID:14265, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51892] Another function of GAM7776 is therefore inhibition of FLJ20079 (Accession NP_060126.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20079.

[51893] FLJ20095 (Accession NP_060136.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ20095 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ20095, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20095 BINDING SITE, designated SEQ ID:7385, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51894] Another function of GAM7776 is therefore inhibition of FLJ20095 (Accession NP_060136.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20095.

[51895] FLJ20136 (Accession NP_060154.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ20136 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ20136, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20136 BINDING SITE, designated SEQ ID:4536, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51896] Another function of GAM7776 is therefore inhibition of FLJ20136 (Accession NP_060154.1) . Accordingly, utilities

of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20136.

[51897] FLJ20147 (Accession NP_060157.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ20147 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ20147, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20147 BINDING SITE, designated SEQ ID:2624, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51898] Another function of GAM7776 is therefore inhibition of FLJ20147 (Accession NP_060157.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20147.

[51899] FLJ20245 (Accession NP_060193.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ20245 BINDING SITE1 and FLJ20245 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ20245, corresponding to target binding sites

such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20245 BINDING SITE1 and FLJ20245 BINDING SITE2, designated SEQ ID:8581 and SEQ ID:5275 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51900] Another function of GAM7776 is therefore inhibition of FLJ20245 (Accession NP_060193.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20245.

[51901] FLJ20257 (Accession NP_062552.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ20257 BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by FLJ20257, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20257 BINDING SITE, designated SEQ ID:7206, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51902] Another function of GAM7776 is therefore inhibition of

FLJ20257 (Accession NP_062552.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20257.

[51903] FLJ20344 (Accession NP_060246.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ20344 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ20344, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20344 BINDING SITE, designated SEQ ID:4079, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51904] Another function of GAM7776 is therefore inhibition of FLJ20344 (Accession NP_060246.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20344.

[51905] FLJ20359 (Accession NP_060251.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ20359 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ20359, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20359 BINDING SITE, designated SEQ ID:11024, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51906] Another function of GAM7776 is therefore inhibition of FLJ20359 (Accession NP_060251.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20359.

[51907] FLJ20375 (Accession NP_060264.2) is another GAM7776 target gene, herein designated TARGET GENE. FLJ20375 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ20375, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20375 BINDING SITE, designated SEQ ID:9357, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51908] Another function of GAM7776 is therefore inhibition of FLJ20375 (Accession NP_060264.2) . Accordingly, utilities

of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20375.

[51909] FLJ20511 (Accession NP_060323.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ20511 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ20511, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20511 BINDING SITE, designated SEQ ID:17759, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51910] Another function of GAM7776 is therefore inhibition of FLJ20511 (Accession NP_060323.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20511.

[51911] FLJ20527 (Accession NP_060333.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ20527 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FLJ20527, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20527 BINDING SITE, designated SEQ ID:17075, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51912] Another function of GAM7776 is therefore inhibition of FLJ20527 (Accession NP_060333.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20527.

[51913] FLJ20671 (Accession NP_060394.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ20671 BINDING SITE1 and FLJ20671 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ20671, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20671 BINDING SITE1 and FLJ20671 BINDING SITE2, designated SEQ ID:16491 and SEQ ID:13041 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51914] Another function of GAM7776 is therefore inhibition of

FLJ20671 (Accession NP_060394.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20671.

[51915] FLJ20700 (Accession NP_060402.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ20700 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ20700, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20700 BINDING SITE, designated SEQ ID:18943, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51916] Another function of GAM7776 is therefore inhibition of FLJ20700 (Accession NP_060402.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20700.

[51917] FLJ20813 (Accession NP_060431.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ20813 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ20813, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20813 BINDING SITE, designated SEQ ID:10574, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51918] Another function of GAM7776 is therefore inhibition of FLJ20813 (Accession NP_060431.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20813.

[51919] FLJ21128 (Accession NP_079359.2) is another GAM7776 target gene, herein designated TARGET GENE. FLJ21128 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ21128, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ21128 BINDING SITE, designated SEQ ID:17516, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51920] Another function of GAM7776 is therefore inhibition of FLJ21128 (Accession NP_079359.2) . Accordingly, utilities

of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ21128.

[51921] FLJ21603 (Accession NP_079038.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ21603 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ21603, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ21603 BINDING SITE, designated SEQ ID:15047, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51922] Another function of GAM7776 is therefore inhibition of FLJ21603 (Accession NP_079038.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ21603.

[51923] FLJ21673 (Accession NP_112160.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ21673 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FLJ21673, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ21673 BINDING SITE, designated SEQ ID:1435, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51924] Another function of GAM7776 is therefore inhibition of FLJ21673 (Accession NP_112160.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ21673.

[51925] FLJ21777 (Accession NP_115585.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ21777 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ21777, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ21777 BINDING SITE, designated SEQ ID:4203, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51926] Another function of GAM7776 is therefore inhibition of FLJ21777 (Accession NP_115585.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment

of diseases and clinical conditions associated with FLJ21777.

[51927] FLJ22329 (Accession NP_078932.2) is another GAM7776 target gene, herein designated TARGET GENE. FLJ22329 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ22329, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ22329 BINDING SITE, designated SEQ ID:9543, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51928] Another function of GAM7776 is therefore inhibition of FLJ22329 (Accession NP_078932.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ22329.

[51929] FLJ22531 (Accession NP_078926.2) is another GAM7776 target gene, herein designated TARGET GENE. FLJ22531 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FLJ22531, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of FLJ22531 BINDING SITE, designated SEQ ID:5636, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51930] Another function of GAM7776 is therefore inhibition of FLJ22531 (Accession NP_078926.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ22531.

[51931] FLJ22794 (Accession NP_071357.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ22794 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ22794, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ22794 BINDING SITE, designated SEQ ID:5559, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51932] Another function of GAM7776 is therefore inhibition of FLJ22794 (Accession NP_071357.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

FLJ22794.

[51933] FLJ22965 (Accession NP_071384.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ22965 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ22965, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ22965 BINDING SITE, designated SEQ ID:2808, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51934] Another function of GAM7776 is therefore inhibition of FLJ22965 (Accession NP_071384.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ22965.

[51935] FLJ23024 (Accession NP_079212.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ23024 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ23024, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

FLJ23024 BINDING SITE, designated SEQ ID:9682, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51936] Another function of GAM7776 is therefore inhibition of FLJ23024 (Accession NP_079212.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ23024.

[51937] FLJ23053 (Accession NP_075058.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ23053 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ23053, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ23053 BINDING SITE, designated SEQ ID:8693, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51938] Another function of GAM7776 is therefore inhibition of FLJ23053 (Accession NP_075058.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ23053.

[51939] FLJ23186 (Accession NP_078892.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ23186 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ23186, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ23186 BINDING SITE, designated SEQ ID:1340, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51940] Another function of GAM7776 is therefore inhibition of FLJ23186 (Accession NP_078892.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ23186.

[51941] FLJ23263 (Accession NP_079391.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ23263 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FLJ23263, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ23263 BINDING SITE, designated SEQ ID:11523, to the

nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51942] Another function of GAM7776 is therefore inhibition of FLJ23263 (Accession NP_079391.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ23263.

[51943] FLJ23356 (Accession NP_115613.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ23356 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ23356, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ23356 BINDING SITE, designated SEQ ID:12273, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51944] Another function of GAM7776 is therefore inhibition of FLJ23356 (Accession NP_115613.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ23356.

[51945] FLJ23392 (Accession NP_079060.1) is another GAM7776

target gene, herein designated TARGET GENE. FLJ23392 BINDING SITE1 through FLJ23392 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by FLJ23392, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ23392 BINDING SITE1 through FLJ23392 BINDING SITE3, designated SEQ ID:20052, SEQ ID:5554 and SEQ ID:9148 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51946] Another function of GAM7776 is therefore inhibition of FLJ23392 (Accession NP_079060.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ23392.

[51947] FLJ23416 (Accession NP_115614.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ23416 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ23416, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

FLJ23416 BINDING SITE, designated SEQ ID:2152, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51948] Another function of GAM7776 is therefore inhibition of FLJ23416 (Accession NP_115614.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ23416.

[51949] FLJ23556 (Accession NP_079156.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ23556 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ23556, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ23556 BINDING SITE, designated SEQ ID:17969, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51950] Another function of GAM7776 is therefore inhibition of FLJ23556 (Accession NP_079156.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ23556.

[51951] FLJ23563 (Accession XP_041701.4) is another GAM7776 target gene, herein designated TARGET GENE. FLJ23563 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ23563, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ23563 BINDING SITE, designated SEQ ID:15048, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51952] Another function of GAM7776 is therefore inhibition of FLJ23563 (Accession XP_041701.4). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ23563.

[51953] FLJ23867 (Accession NP_689875.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ23867 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ23867, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ23867 BINDING SITE, designated SEQ ID:1374, to the

nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51954] Another function of GAM7776 is therefore inhibition of FLJ23867 (Accession NP_689875.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ23867.

[51955] FLJ25416 (Accession NP_659455.2) is another GAM7776 target gene, herein designated TARGET GENE. FLJ25416 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FLJ25416, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ25416 BINDING SITE, designated SEQ ID:16915, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51956] Another function of GAM7776 is therefore inhibition of FLJ25416 (Accession NP_659455.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ25416.

[51957] FLJ25795 (Accession NP_689633.1) is another GAM7776

target gene, herein designated TARGET GENE. FLJ25795 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ25795, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ25795 BINDING SITE, designated SEQ ID:934, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51958] Another function of GAM7776 is therefore inhibition of FLJ25795 (Accession NP_689633.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ25795.

[51959] FLJ30507 (Accession NP_694555.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ30507 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FLJ30507, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ30507 BINDING SITE, designated SEQ ID:17957, to the nucleotide sequence of GAM7776 RNA, herein designated

GAM RNA, also designated SEQ ID:246.

[51960] Another function of GAM7776 is therefore inhibition of FLJ30507 (Accession NP_694555.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ30507.

[51961] FLJ30532 (Accession NP_653325.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ30532 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ30532, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ30532 BINDING SITE, designated SEQ ID:19834, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51962] Another function of GAM7776 is therefore inhibition of FLJ30532 (Accession NP_653325.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ30532.

[51963] FLJ31139 (Accession NP_775928.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ31139

BINDING SITE1 through FLJ31139 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by FLJ31139, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ31139 BINDING SITE1 through FLJ31139 BINDING SITE3, designated SEQ ID:3952, SEQ ID:18868 and SEQ ID:15200 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51964] Another function of GAM7776 is therefore inhibition of FLJ31139 (Accession NP_775928.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ31139.

[51965] FLJ31153 (Accession NP_653201.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ31153 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ31153, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ31153 BINDING SITE, designated SEQ ID:7373, to the

nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51966] Another function of GAM7776 is therefore inhibition of FLJ31153 (Accession NP_653201.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ31153.

[51967] FLJ31166 (Accession NP_694567.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ31166 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ31166, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ31166 BINDING SITE, designated SEQ ID:19301, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51968] Another function of GAM7776 is therefore inhibition of FLJ31166 (Accession NP_694567.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ31166.

[51969] FLJ31338 (Accession NP_689682.1) is another GAM7776

target gene, herein designated TARGET GENE. FLJ31338 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ31338, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ31338 BINDING SITE, designated SEQ ID:1672, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51970] Another function of GAM7776 is therefore inhibition of FLJ31338 (Accession NP_689682.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ31338.

[51971] FLJ31384 (Accession NP_689685.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ31384 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ31384, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ31384 BINDING SITE, designated SEQ ID:14326, to the nucleotide sequence of GAM7776 RNA, herein designated

GAM RNA, also designated SEQ ID:246.

[51972] Another function of GAM7776 is therefore inhibition of FLJ31384 (Accession NP_689685.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ31384.

[51973] FLJ31393 (Accession NP_694569.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ31393 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FLJ31393, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ31393 BINDING SITE, designated SEQ ID:9670, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51974] Another function of GAM7776 is therefore inhibition of FLJ31393 (Accession NP_694569.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ31393.

[51975] FLJ31401 (Accession NP_689877.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ31401

BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ31401, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ31401 BINDING SITE, designated SEQ ID:16543, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51976] Another function of GAM7776 is therefore inhibition of FLJ31401 (Accession NP_689877.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ31401.

[51977] FLJ32096 (Accession NP_776156.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ32096 BINDING SITE1 and FLJ32096 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ32096, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ32096 BINDING SITE1 and FLJ32096 BINDING SITE2, designated SEQ ID:16043 and SEQ ID:1025 respectively, to the nucleotide sequence of

GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51978] Another function of GAM7776 is therefore inhibition of FLJ32096 (Accession NP_776156.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ32096.

[51979] FLJ32130 (Accession NP_689671.2) is another GAM7776 target gene, herein designated TARGET GENE. FLJ32130 BINDING SITE1 through FLJ32130 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by FLJ32130, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ32130 BINDING SITE1 through FLJ32130 BINDING SITE3, designated SEQ ID:4630, SEQ ID:15049 and SEQ ID:2061 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51980] Another function of GAM7776 is therefore inhibition of FLJ32130 (Accession NP_689671.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

FLJ32130.

[51981] FLJ32206 (Accession NP_689710.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ32206 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ32206, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ32206 BINDING SITE, designated SEQ ID:3860, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51982] Another function of GAM7776 is therefore inhibition of FLJ32206 (Accession NP_689710.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ32206.

[51983] FLJ32334 (Accession NP_653166.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ32334 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ32334, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

FLJ32334 BINDING SITE, designated SEQ ID:8493, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51984] Another function of GAM7776 is therefore inhibition of FLJ32334 (Accession NP_653166.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ32334.

[51985] FLJ32499 (Accession NP_653208.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ32499 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ32499, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ32499 BINDING SITE, designated SEQ ID:4681, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51986] Another function of GAM7776 is therefore inhibition of FLJ32499 (Accession NP_653208.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ32499.

[51987] FLJ32731 (Accession NP_689632.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ32731 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ32731, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ32731 BINDING SITE, designated SEQ ID:16099, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51988] Another function of GAM7776 is therefore inhibition of FLJ32731 (Accession NP_689632.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ32731.

[51989] FLJ32803 (Accession NP_694584.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ32803 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ32803, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ32803 BINDING SITE, designated SEQ ID:1856, to the

nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51990] Another function of GAM7776 is therefore inhibition of FLJ32803 (Accession NP_694584.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ32803.

[51991] FLJ32865 (Accession NP_653214.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ32865 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ32865, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ32865 BINDING SITE, designated SEQ ID:2146, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51992] Another function of GAM7776 is therefore inhibition of FLJ32865 (Accession NP_653214.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ32865.

[51993] FLJ32894 (Accession NP_653268.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ32894 BINDING SITE is a target binding site found in the 3' un-

translated region of mRNA encoded by FLJ32894, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ32894 BINDING SITE, designated SEQ ID:7467, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51994] Another function of GAM7776 is therefore inhibition of FLJ32894 (Accession NP_653268.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ32894.

[51995] FLJ32932 (Accession NP_690873.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ32932 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ32932, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ32932 BINDING SITE, designated SEQ ID:9555, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51996] Another function of GAM7776 is therefore inhibition of

FLJ32932 (Accession NP_690873.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ32932.

[51997] FLJ33505 (Accession NP_689530.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ33505 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ33505, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ33505 BINDING SITE, designated SEQ ID:13693, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[51998] Another function of GAM7776 is therefore inhibition of FLJ33505 (Accession NP_689530.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ33505.

[51999] FLJ33655 (Accession NP_775912.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ33655 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ33655, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ33655 BINDING SITE, designated SEQ ID:16113, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52000] Another function of GAM7776 is therefore inhibition of FLJ33655 (Accession NP_775912.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ33655.

[52001] FLJ34817 (Accession NP_689516.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ34817 BINDING SITE1 and FLJ34817 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ34817, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ34817 BINDING SITE1 and FLJ34817 BINDING SITE2, designated SEQ ID:4004 and SEQ ID:7075 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52002] Another function of GAM7776 is therefore inhibition of FLJ34817 (Accession NP_689516.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ34817.

[52003] FLJ34922 (Accession NP_689483.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ34922 BINDING SITE is a target binding site found in the 5` un-translated region of mRNA encoded by FLJ34922, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ34922 BINDING SITE, designated SEQ ID:18132, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52004] Another function of GAM7776 is therefore inhibition of FLJ34922 (Accession NP_689483.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ34922.

[52005] FLJ34969 (Accession XP_114353.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ34969 BINDING SITE is a target binding site found in the 3` un-

translated region of mRNA encoded by FLJ34969, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ34969 BINDING SITE, designated SEQ ID:581, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52006] Another function of GAM7776 is therefore inhibition of FLJ34969 (Accession XP_114353.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ34969.

[52007] FLJ35105 (Accession NP_689890.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ35105 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by FLJ35105, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ35105 BINDING SITE, designated SEQ ID:18938, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52008] Another function of GAM7776 is therefore inhibition of

FLJ35105 (Accession NP_689890.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ35105.

[52009] FLJ35681 (Accession NP_787096.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ35681 BINDING SITE1 and FLJ35681 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ35681, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ35681 BINDING SITE1 and FLJ35681 BINDING SITE2, designated SEQ ID:1653 and SEQ ID:11521 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52010] Another function of GAM7776 is therefore inhibition of FLJ35681 (Accession NP_787096.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ35681.

[52011] FLJ35848 (Accession XP_290755.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ35848

BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ35848, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ35848 BINDING SITE, designated SEQ ID:14986, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52012] Another function of GAM7776 is therefore inhibition of FLJ35848 (Accession XP_290755.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ35848.

[52013] FLJ36445 (Accession NP_694965.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ36445 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ36445, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ36445 BINDING SITE, designated SEQ ID:2147, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52014] Another function of GAM7776 is therefore inhibition of FLJ36445 (Accession NP_694965.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ36445.

[52015] FLJ37045 (Accession NP_787085.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ37045 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ37045, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ37045 BINDING SITE, designated SEQ ID:9497, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52016] Another function of GAM7776 is therefore inhibition of FLJ37045 (Accession NP_787085.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ37045.

[52017] FLJ37078 (Accession NP_694588.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ37078 BINDING SITE is a target binding site found in the 5' un-

translated region of mRNA encoded by FLJ37078, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ37078 BINDING SITE, designated SEQ ID:11528, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52018] Another function of GAM7776 is therefore inhibition of FLJ37078 (Accession NP_694588.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ37078.

[52019] FLJ37433 (Accession NP_848612.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ37433 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ37433, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ37433 BINDING SITE, designated SEQ ID:8582, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52020] Another function of GAM7776 is therefore inhibition of

FLJ37433 (Accession NP_848612.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ37433.

[52021] FLJ37543 (Accession NP_775938.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ37543 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ37543, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ37543 BINDING SITE, designated SEQ ID:5495, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52022] Another function of GAM7776 is therefore inhibition of FLJ37543 (Accession NP_775938.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ37543.

[52023] FLJ38101 (Accession NP_694993.2) is another GAM7776 target gene, herein designated TARGET GENE. FLJ38101 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ38101, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ38101 BINDING SITE, designated SEQ ID:5589, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52024] Another function of GAM7776 is therefore inhibition of FLJ38101 (Accession NP_694993.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ38101.

[52025] FLJ38149 (Accession XP_091919.5) is another GAM7776 target gene, herein designated TARGET GENE. FLJ38149 BINDING SITE1 through FLJ38149 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by FLJ38149, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ38149 BINDING SITE1 through FLJ38149 BINDING SITE3, designated SEQ ID:15044, SEQ ID:18971 and SEQ ID:9373 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52026] Another function of GAM7776 is therefore inhibition of FLJ38149 (Accession XP_091919.5) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ38149.

[52027] FLJ38281 (Accession NP_689814.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ38281 BINDING SITE1 and FLJ38281 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ38281, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ38281 BINDING SITE1 and FLJ38281 BINDING SITE2, designated SEQ ID:6885 and SEQ ID:9492 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52028] Another function of GAM7776 is therefore inhibition of FLJ38281 (Accession NP_689814.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ38281.

[52029] FLJ38607 (Accession NP_689867.1) is another GAM7776

target gene, herein designated TARGET GENE. FLJ38607 BINDING SITE1 and FLJ38607 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ38607, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ38607 BINDING SITE1 and FLJ38607 BINDING SITE2, designated SEQ ID:16688 and SEQ ID:7382 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52030] Another function of GAM7776 is therefore inhibition of FLJ38607 (Accession NP_689867.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ38607.

[52031] FLJ38792 (Accession NP_848615.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ38792 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ38792, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

FLJ38792 BINDING SITE, designated SEQ ID:14861, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52032] Another function of GAM7776 is therefore inhibition of FLJ38792 (Accession NP_848615.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ38792.

[52033] FLJ38819 (Accession NP_665872.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ38819 BINDING SITE1 and FLJ38819 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ38819, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ38819 BINDING SITE1 and FLJ38819 BINDING SITE2, designated SEQ ID:9791 and SEQ ID:18642 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52034] Another function of GAM7776 is therefore inhibition of FLJ38819 (Accession NP_665872.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment

of diseases and clinical conditions associated with FLJ38819.

[52035] FLJ38991 (Accession NP_776188.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ38991 BINDING SITE1 and FLJ38991 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ38991, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ38991 BINDING SITE1 and FLJ38991 BINDING SITE2, designated SEQ ID:14236 and SEQ ID:10356 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52036] Another function of GAM7776 is therefore inhibition of FLJ38991 (Accession NP_776188.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ38991.

[52037] FLJ39415 (Accession NP_775952.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ39415 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ39415, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ39415 BINDING SITE, designated SEQ ID:11673, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52038] Another function of GAM7776 is therefore inhibition of FLJ39415 (Accession NP_775952.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ39415.

[52039] FLJ39599 (Accession NP_776164.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ39599 BINDING SITE1 and FLJ39599 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ39599, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ39599 BINDING SITE1 and FLJ39599 BINDING SITE2, designated SEQ ID:16001 and SEQ ID:8232 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52040] Another function of GAM7776 is therefore inhibition of FLJ39599 (Accession NP_776164.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ39599.

[52041] FLJ39639 (Accession XP_290687.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ39639 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ39639, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ39639 BINDING SITE, designated SEQ ID:9190, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52042] Another function of GAM7776 is therefore inhibition of FLJ39639 (Accession XP_290687.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ39639.

[52043] FLJ90231 (Accession NP_775852.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ90231 BINDING SITE is a target binding site found in the 3' un-

translated region of mRNA encoded by FLJ90231, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ90231 BINDING SITE, designated SEQ ID:10357, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52044] Another function of GAM7776 is therefore inhibition of FLJ90231 (Accession NP_775852.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ90231.

[52045] FLJ90723 (Accession NP_787115.1) is another GAM7776 target gene, herein designated TARGET GENE. FLJ90723 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ90723, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ90723 BINDING SITE, designated SEQ ID:19889, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52046] Another function of GAM7776 is therefore inhibition of

FLJ90723 (Accession NP_787115.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ90723.

[52047] Formin binding protein 1 (FBNP1, Accession XP_052666.3) is another GAM7776 target gene, herein designated TARGET GENE. FBNP1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FBNP1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FBNP1 BINDING SITE, designated SEQ ID:16354, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52048] Another function of GAM7776 is therefore inhibition of Formin binding protein 1 (FBNP1, Accession XP_052666.3) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FBNP1.

[52049] Forkhead box e2 (FOX E2, Accession NP_036317.1) is another GAM7776 target gene, herein designated TARGET GENE. FOX E2 BINDING SITE is a target binding site found

in the 5' untranslated region of mRNA encoded by FOXE2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FOXE2 BINDING SITE, designated SEQ ID:15626, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52050] Another function of GAM7776 is therefore inhibition of Forkhead box e2 (FOXE2, Accession NP_036317.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FOXE2.

[52051] Forkhead box o1a (rhabdomyosarcoma) (FOXO1A, Accession NP_002006.2) is another GAM7776 target gene, herein designated TARGET GENE. FOXO1A BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FOXO1A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FOXO1A BINDING SITE, designated SEQ ID:736, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52052] Another function of GAM7776 is therefore inhibition of Forkhead box o1a (rhabdomyosarcoma) (FOXO1A, Accession NP_002006.2), a gene which is a probable transcription factor. and therefore may be associated with Alveolar rhabdomyosarcoma- 2. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Alveolar rhabdomyosarcoma- 2., and of other diseases and clinical conditions associated with FOXO1A.

[52053] The function of FOXO1A and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1.Fsh primary response (Irrp1 homolog, rat) 1 (FSHPRH1, Accession NP_006724.1) is another GAM7776 target gene, herein designated TARGET GENE. FSHPRH1 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FSHPRH1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FSHPRH1 BINDING SITE, designated SEQ ID:11528, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52054] Another function of GAM7776 is therefore inhibition of

Fsh primary response (Irfpr1 homolog, rat) 1 (FSHPRH1, Accession NP_006724.1), a gene which is involved in the response of gonadal tissues to follicle- stimulating hormone. and therefore may be associated with Hypergonadotropic ovarian dysgenesis (odg), x- linked disorders of gonadal development. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Hypergonadotropic ovarian dysgenesis (odg), x- linked disorders of gonadal development, and of other diseases and clinical conditions associated with FSHPRH1.

[52055] The function of FSHPRH1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1.Fucosyltransferase 1 (galactoside 2-alpha-l-fucosyltransferase, bombay phenotype included) (FUT1, Accession NP_000139.1) is another GAM7776 target gene, herein designated TARGET GENE. FUT1 BINDING SITE1 and FUT1 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FUT1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FUT1 BINDING SITE1 and FUT1

BINDING SITE2, designated SEQ ID:11525 and SEQ ID:16365 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52056] Another function of GAM7776 is therefore inhibition of Fucosyltransferase 1 (galactoside 2- α -l-fucosyltransferase, bombay phenotype included) (FUT1, Accession NP_000139.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FUT1.

[52057] Frizzled homolog 4 (drosophila) (FZD4, Accession NP_036325.2) is another GAM7776 target gene, herein designated TARGET GENE. FZD4 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FZD4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FZD4 BINDING SITE, designated SEQ ID:4487, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52058] Another function of GAM7776 is therefore inhibition of

Frizzled homolog 4 (drosophila) (FZD4, Accession NP_036325.2), a gene which may function in cell polarity, cell fate specification and cancer; similar to frizzled receptor family, has seven transmembrane domains and therefore may be associated with Familial exudative vitreoretinopathy. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Familial exudative vitreoretinopathy., and of other diseases and clinical conditions associated with FZD4.

[52059] The function of FZD4 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM67.1.G2A (Accession NP_037477.1) is another GAM7776 target gene, herein designated TARGET GENE. G2A BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by G2A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of G2A BINDING SITE, designated SEQ ID:8714, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52060] Another function of GAM7776 is therefore inhibition of

G2A (Accession NP_037477.1), a gene which may mediate some of the effects of extracellular atp on insulin secretion. and therefore may be associated with Autoimmune disease. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Autoimmune disease., and of other diseases and clinical conditions associated with G2A.

[52061] The function of G2A and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1.Glucose-6-phosphatase, catalytic (glycogen storage disease type i, von gierke disease) (G6PC, Accession NP_000142.1) is another GAM7776 target gene, herein designated TARGET GENE. G6PC BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by G6PC, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of G6PC BINDING SITE, designated SEQ ID:4204, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52062] Another function of GAM7776 is therefore inhibition of

Glucose-6-phosphatase, catalytic (glycogen storage disease type i, von gierke disease) (G6PC, Accession NP_000142.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with G6PC.

[52063] GAL3ST-4 (Accession NP_078913.3) is another GAM7776 target gene, herein designated TARGET GENE. GAL3ST-4 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GAL3ST-4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GAL3ST-4 BINDING SITE, designated SEQ ID:4518, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52064] Another function of GAM7776 is therefore inhibition of GAL3ST-4 (Accession NP_078913.3) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GAL3ST-4.

[52065] Gata binding protein 2 (GATA2, Accession NP_116027.2) is another GAM7776 target gene, herein designated TARGET GENE. GATA2 BINDING SITE is a target binding site

found in the 3' untranslated region of mRNA encoded by GATA2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GATA2 BINDING SITE, designated SEQ ID:16014, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52066] Another function of GAM7776 is therefore inhibition of Gata binding protein 2 (GATA2, Accession NP_116027.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GATA2.

[52067] Golgi associated, gamma adaptin ear containing, arf binding protein 2 (GGA2, Accession NP_055859.1) is another GAM7776 target gene, herein designated TARGET GENE. GGA2 BINDING SITE1 and GGA2 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by GGA2, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GGA2 BINDING SITE1 and GGA2 BINDING SITE2, designated SEQ

ID:6391 and SEQ ID:5631 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52068] Another function of GAM7776 is therefore inhibition of Golgi associated, gamma adaptin ear containing, arf binding protein 2 (GGA2, Accession NP_055859.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GGA2.

[52069] Golgi associated, gamma adaptin ear containing, arf binding protein 2 (GGA2, Accession NP_055859.1) is another GAM7776 target gene, herein designated TARGET GENE. GGA2 BINDING SITE1 and GGA2 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by GGA2, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GGA2 BINDING SITE1 and GGA2 BINDING SITE2, designated SEQ ID:5631 and SEQ ID:6391 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52070] Another function of GAM7776 is therefore inhibition of

Golgi associated, gamma adaptin ear containing, arf binding protein 2 (GGA2, Accession NP_055859.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GGA2.

[52071] Gm2 ganglioside activator protein (GM2A, Accession NP_000396.1) is another GAM7776 target gene, herein designated TARGET GENE. GM2A BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GM2A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GM2A BINDING SITE, designated SEQ ID:11286, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52072] Another function of GAM7776 is therefore inhibition of Gm2 ganglioside activator protein (GM2A, Accession NP_000396.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GM2A.

[52073] GNE (Accession NP_005467.1) is another GAM7776 target gene, herein designated TARGET GENE. GNE BINDING SITE

is a target binding site found in the 3' untranslated region of mRNA encoded by GNE, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GNE BINDING SITE, designated SEQ ID:8367, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52074] Another function of GAM7776 is therefore inhibition of GNE (Accession NP_005467.1), a gene which has roles in sialic acid biosynthesis and regulates cell surface sialylation. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GNE.

[52075] The function of GNE and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1. Guanine nucleotide binding protein (g protein), gamma 4 (GNG4, Accession NP_004476.1) is another GAM7776 target gene, herein designated TARGET GENE. GNG4 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GNG4, corresponding to a target binding site such as BINDING

SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GNG4 BINDING SITE, designated SEQ ID:559, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52076] Another function of GAM7776 is therefore inhibition of Guanine nucleotide binding protein (g protein), gamma 4 (GNG4, Accession NP_004476.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GNG4.

[52077] GNPAT1 (Accession XP_085119.1) is another GAM7776 target gene, herein designated TARGET GENE. GNPAT1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GNPAT1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GNPAT1 BINDING SITE, designated SEQ ID:8464, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52078] Another function of GAM7776 is therefore inhibition of GNPAT1 (Accession XP_085119.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment

of diseases and clinical conditions associated with GNPAT1.

[52079] GNRPX (Accession NP_060519.1) is another GAM7776 target gene, herein designated TARGET GENE. GNRPX BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GNRPX, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GNRPX BINDING SITE, designated SEQ ID:12243, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52080] Another function of GAM7776 is therefore inhibition of GNRPX (Accession NP_060519.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GNRPX.

[52081] Golgi autoantigen, golgin subfamily a, 3 (GOLGA3, Accession NP_005886.2) is another GAM7776 target gene, herein designated TARGET GENE. GOLGA3 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by GOLGA3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 il-

illustrates the complementarity of the nucleotide sequences of GOLGA3 BINDING SITE, designated SEQ ID:15049, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52082] Another function of GAM7776 is therefore inhibition of Golgi autoantigen, golgin subfamily a, 3 (GOLGA3, Accession NP_005886.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GOLGA3.

[52083] Glycoprotein v (platelet) (GP5, Accession NP_004479.1) is another GAM7776 target gene, herein designated TARGET GENE. GP5 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GP5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GP5 BINDING SITE, designated SEQ ID:5681, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52084] Another function of GAM7776 is therefore inhibition of Glycoprotein v (platelet) (GP5, Accession NP_004479.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions

associated with GP5.

[52085] GPP34R (Accession NP_060648.2) is another GAM7776 target gene, herein designated TARGET GENE. GPP34R BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GPP34R, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GPP34R BINDING SITE, designated SEQ ID:14203, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52086] Another function of GAM7776 is therefore inhibition of GPP34R (Accession NP_060648.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GPP34R.

[52087] G protein-coupled receptor 26 (GPR26, Accession NP_703143.1) is another GAM7776 target gene, herein designated TARGET GENE. GPR26 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GPR26, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GPR26 BINDING SITE, designated

SEQ ID:3010, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52088] Another function of GAM7776 is therefore inhibition of G protein-coupled receptor 26 (GPR26, Accession NP_703143.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GPR26.

[52089] G protein-coupled receptor 4 (GPR4, Accession NP_005273.1) is another GAM7776 target gene, herein designated TARGET GENE. GPR4 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GPR4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GPR4 BINDING SITE, designated SEQ ID:4965, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52090] Another function of GAM7776 is therefore inhibition of G protein-coupled receptor 4 (GPR4, Accession NP_005273.1), a gene which stimulates to produce increased calcium by both SPC and LPC . Accordingly, utili-

ties of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GPR4.

[52091] The function of GPR4 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1.G protein-coupled receptor 56 (GPR56, Accession NP_005673.2) is another GAM7776 target gene, herein designated TARGET GENE. GPR56 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by GPR56, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GPR56 BINDING SITE, designated SEQ ID:8622, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52092] Another function of GAM7776 is therefore inhibition of G protein-coupled receptor 56 (GPR56, Accession NP_005673.2), a gene which transduces extracellular signals through heterotrimeric G proteins. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

GPR56.

[52093] The function of GPR56 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM63.1.G protein-coupled receptor 66 (GPR66, Accession NP_006047.2) is another GAM7776 target gene, herein designated TARGET GENE. GPR66 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GPR66, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GPR66 BINDING SITE, designated SEQ ID:19237, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52094] Another function of GAM7776 is therefore inhibition of G protein-coupled receptor 66 (GPR66, Accession NP_006047.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GPR66.

[52095] G protein-coupled receptor 81 (GPR81, Accession NP_115943.1) is another GAM7776 target gene, herein designated TARGET GENE. GPR81 BINDING SITE is a target

binding site found in the 3' untranslated region of mRNA encoded by GPR81, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GPR81 BINDING SITE, designated SEQ ID:13260, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52096] Another function of GAM7776 is therefore inhibition of G protein-coupled receptor 81 (GPR81, Accession NP_115943.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GPR81.

[52097] GR6 (Accession NP_031380.1) is another GAM7776 target gene, herein designated TARGET GENE. GR6 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by GR6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GR6 BINDING SITE, designated SEQ ID:2604, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52098] Another function of GAM7776 is therefore inhibition of GR6 (Accession NP_031380.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GR6.

[52099] GRAF (Accession NP_055886.1) is another GAM7776 target gene, herein designated TARGET GENE. GRAF BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GRAF, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GRAF BINDING SITE, designated SEQ ID:4362, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52100] Another function of GAM7776 is therefore inhibition of GRAF (Accession NP_055886.1), a gene which is a GTPase activating protein for p21- rac and therefore may be associated with Juvenile myelomonocytic leukemia. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Juvenile myelomonocytic leukemia, and of other diseases and clinical conditions associated with GRAF.

[52101] The function of GRAF and its association with various dis-

eases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1.GREB1 (Accession NP_055483.2) is another GAM7776 target gene, herein designated TARGET GENE. GREB1 BINDING SITE1 through GREB1 BINDING SITE3 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by GREB1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GREB1 BINDING SITE1 through GREB1 BINDING SITE3, designated SEQ ID:9792, SEQ ID:11815 and SEQ ID:14861 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52102] Another function of GAM7776 is therefore inhibition of GREB1 (Accession NP_055483.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GREB1.

[52103] Glutamate receptor, ionotropic, delta 1 (GRID1, Accession XP_043613.8) is another GAM7776 target gene, herein designated TARGET GENE. GRID1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GRID1, corresponding to a target binding site

such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GRID1 BINDING SITE, designated SEQ ID:17390, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52104] Another function of GAM7776 is therefore inhibition of Glutamate receptor, ionotropic, delta 1 (GRID1, Accession XP_043613.8) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GRID1.

[52105] Glutamate receptor, ionotropic, n-methyl d-aspartate-like 1a (GRINL1A, Accession NP_056347.1) is another GAM7776 target gene, herein designated TARGET GENE. GRINL1A BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GRINL1A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GRINL1A BINDING SITE, designated SEQ ID:5433, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52106] Another function of GAM7776 is therefore inhibition of

Glutamate receptor, ionotropic, n-methyl d-aspartate-like 1a (GRINL1A, Accession NP_056347.1), a gene which plays a role in the development and function of the mammalian brain. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GRINL1A.

[52107] The function of GRINL1A and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1. Glutamate receptor, metabotropic 6 (GRM6, Accession NP_000834.1) is another GAM7776 target gene, herein designated TARGET GENE. GRM6 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GRM6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GRM6 BINDING SITE, designated SEQ ID:10398, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52108] Another function of GAM7776 is therefore inhibition of Glutamate receptor, metabotropic 6 (GRM6, Accession NP_000834.1). Accordingly, utilities of GAM7776 include

diagnosis, prevention and treatment of diseases and clinical conditions associated with GRM6.

[52109] GRWD (Accession NP_113673.2) is another GAM7776 target gene, herein designated TARGET GENE. GRWD BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GRWD, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GRWD BINDING SITE, designated SEQ ID:7996, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52110] Another function of GAM7776 is therefore inhibition of GRWD (Accession NP_113673.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GRWD.

[52111] GSDM (Accession NP_835465.1) is another GAM7776 target gene, herein designated TARGET GENE. GSDM BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by GSDM, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide se-

quences of GSDM BINDING SITE, designated SEQ ID:3199, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52112] Another function of GAM7776 is therefore inhibition of GSDM (Accession NP_835465.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GSDM.

[52113] GSDM (Accession XP_209009.1) is another GAM7776 target gene, herein designated TARGET GENE. GSDM BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by GSDM, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GSDM BINDING SITE, designated SEQ ID:3199, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52114] Another function of GAM7776 is therefore inhibition of GSDM (Accession XP_209009.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GSDM.

[52115] Glutathione s-transferase m1 (GSTM1, Accession NP_666533.1) is another GAM7776 target gene, herein

designated TARGET GENE. GSTM1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by GSTM1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GSTM1 BINDING SITE, designated SEQ ID:12752, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52116] Another function of GAM7776 is therefore inhibition of Glutathione s-transferase m1 (GSTM1, Accession NP_666533.1), a gene which is conjugation of reduced glutathione to a wide number of exogenous and endogenous hydrophobic electrophiles. and therefore may be associated with Aplastic anemia and cancer. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Aplastic anemia and cancer, and of other diseases and clinical conditions associated with GSTM1.

[52117] The function of GSTM1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1.Glutathione s-transferase m1 (GSTM1, Accession NP_000552.2) is another GAM7776 target gene,

herein designated TARGET GENE. GSTM1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by GSTM1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GSTM1 BINDING SITE, designated SEQ ID:12752, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52118] Another function of GAM7776 is therefore inhibition of Glutathione s-transferase m1 (GSTM1, Accession NP_000552.2), a gene which is conjugation of reduced glutathione to a wide number of exogenous and endogenous hydrophobic electrophiles. and therefore may be associated with Aplastic anemia and cancer. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Aplastic anemia and cancer, and of other diseases and clinical conditions associated with GSTM1.

[52119] The function of GSTM1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1. Glutathione s-transferase m2 (muscle) (GSTM2, Accession NP_000839.1) is another GAM7776

target gene, herein designated TARGET GENE. GSTM2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GSTM2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GSTM2 BINDING SITE, designated SEQ ID:12752, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52120] Another function of GAM7776 is therefore inhibition of Glutathione s-transferase m2 (muscle) (GSTM2, Accession NP_000839.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GSTM2.

[52121] Glutathione s-transferase m4 (GSTM4, Accession NP_671490.1) is another GAM7776 target gene, herein designated TARGET GENE. GSTM4 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by GSTM4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GSTM4 BINDING SITE, designated SEQ ID:12752, to the

nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52122] Another function of GAM7776 is therefore inhibition of Glutathione s-transferase m4 (GSTM4, Accession NP_671490.1), a gene which conjugates reduced glutathione to a wide number of exogenous and endogenous hydrophobic electrophiles. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GSTM4.

[52123] The function of GSTM4 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1. Glutathione s-transferase m4 (GSTM4, Accession NP_000841.1) is another GAM7776 target gene, herein designated TARGET GENE. GSTM4 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by GSTM4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GSTM4 BINDING SITE, designated SEQ ID:12752, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52124] Another function of GAM7776 is therefore inhibition of Glutathione s-transferase m4 (GSTM4, Accession NP_000841.1), a gene which conjugates reduced glutathione to a wide number of exogenous and endogenous hydrophobic electrophiles. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GSTM4.

[52125] The function of GSTM4 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1. General transcription factor 1, alpha 56kda (GTF2E1, Accession NP_005504.1) is another GAM7776 target gene, herein designated TARGET GENE. GTF2E1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GTF2E1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GTF2E1 BINDING SITE, designated SEQ ID:15661, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52126] Another function of GAM7776 is therefore inhibition of

General transcription factor iie, polypeptide 1, alpha 56kda (GTF2E1, Accession NP_005504.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GTF2E1.

[52127] GTF2IRD2 (Accession NP_115579.3) is another GAM7776 target gene, herein designated TARGET GENE. GTF2IRD2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by GTF2IRD2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GTF2IRD2 BINDING SITE, designated SEQ ID:11522, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52128] Another function of GAM7776 is therefore inhibition of GTF2IRD2 (Accession NP_115579.3) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GTF2IRD2.

[52129] GTF2IRD2 (Accession NP_775808.1) is another GAM7776 target gene, herein designated TARGET GENE. GTF2IRD2

BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by GTF2IRD2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GTF2IRD2 BINDING SITE, designated SEQ ID:11522, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52130] Another function of GAM7776 is therefore inhibition of GTF2IRD2 (Accession NP_775808.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GTF2IRD2.

[52131] GTPBG3 (Accession NP_116009.1) is another GAM7776 target gene, herein designated TARGET GENE. GTPBG3 BINDING SITE1 and GTPBG3 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by GTPBG3, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GTPBG3 BINDING SITE1 and GTPBG3 BINDING SITE2, designated SEQ ID:7812 and SEQ

ID:10292 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52132] Another function of GAM7776 is therefore inhibition of GTPBG3 (Accession NP_116009.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GTPBG3.

[52133] Glycogenin (GYG, Accession NP_004121.2) is another GAM7776 target gene, herein designated TARGET GENE. GYG BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GYG, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GYG BINDING SITE, designated SEQ ID:4258, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52134] Another function of GAM7776 is therefore inhibition of Glycogenin (GYG, Accession NP_004121.2), a gene which primes de novo glycogen synthesis. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GYG.

[52135] The function of GYG and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1.H-plk (Accession NP_056936.1) is another GAM7776 target gene, herein designated TARGET GENE. H-plk BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by H-plk, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of H-plk BINDING SITE, designated SEQ ID:12753, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52136] Another function of GAM7776 is therefore inhibition of H-plk (Accession NP_056936.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with H-plk.

[52137] H2AV (Accession NP_619541.1) is another GAM7776 target gene, herein designated TARGET GENE. H2AV BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by H2AV, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4

illustrates the complementarity of the nucleotide sequences of H2AV BINDING SITE, designated SEQ ID:18864, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52138] Another function of GAM7776 is therefore inhibition of H2AV (Accession NP_619541.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with H2AV.

[52139] H63 (Accession NP_612432.2) is another GAM7776 target gene, herein designated TARGET GENE. H63 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by H63, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of H63 BINDING SITE, designated SEQ ID:4554, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52140] Another function of GAM7776 is therefore inhibition of H63 (Accession NP_612432.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with H63.

[52141] H63 (Accession NP_816929.1) is another GAM7776 target

gene, herein designated TARGET GENE. H63 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by H63, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of H63 BINDING SITE, designated SEQ ID:4554, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52142] Another function of GAM7776 is therefore inhibition of H63 (Accession NP_816929.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with H63.

[52143] Hepatitis a virus cellular receptor 2 (HAVCR2, Accession NP_116171.2) is another GAM7776 target gene, herein designated TARGET GENE. HAVCR2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HAVCR2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HAVCR2 BINDING SITE, designated SEQ ID:16260, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA,

also designated SEQ ID:246.

[52144] Another function of GAM7776 is therefore inhibition of Hepatitis a virus cellular receptor 2 (HAVCR2, Accession NP_116171.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HAVCR2.

[52145] HE9 (Accession NP_741997.1) is another GAM7776 target gene, herein designated TARGET GENE. HE9 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HE9, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HE9 BINDING SITE, designated SEQ ID:7942, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52146] Another function of GAM7776 is therefore inhibition of HE9 (Accession NP_741997.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HE9.

[52147] Hephaestin (HEPH, Accession NP_055614.1) is another GAM7776 target gene, herein designated TARGET GENE. HEPH BINDING SITE is a target binding site found in the 5'

untranslated region of multiple transcripts of mRNA encoded by HEPH, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HEPH BINDING SITE, designated SEQ ID:15338, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52148] Another function of GAM7776 is therefore inhibition of Hephaestin (HEPH, Accession NP_055614.1), a gene which is thought to be a membrane-bound protein responsible for transport of dietary iron from epithelial cells of the intestinal lumen into the circulatory system. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HEPH.

[52149] The function of HEPH and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1.Hexosaminidase a (alpha polypeptide) (HEXA, Accession NP_000511.1) is another GAM7776 target gene, herein designated TARGET GENE. HEXA BINDING SITE is a target binding site found in the 3' untranslated

region of mRNA encoded by HEXA, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HEXA BINDING SITE, designated SEQ ID:14035, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52150] Another function of GAM7776 is therefore inhibition of Hexosaminidase a (alpha polypeptide) (HEXA, Accession NP_000511.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HEXA.

[52151] Holocarboxylase synthetase (biotin-[propionyl-coenzyme a-carboxylase (atp-hydrolysing)] ligase) (HLCS, Accession NP_000402.2) is another GAM7776 target gene, herein designated TARGET GENE. HLCS BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by HLCS, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HLCS BINDING SITE, designated SEQ ID:2142, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ

ID:246.

[52152] Another function of GAM7776 is therefore inhibition of Holocarboxylase synthetase (biotin-[propionyl-coenzyme a-carboxylase (atp-hydrolysing)] ligase) (HLCS, Accession NP_000402.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HLCS.

[52153] High-mobility group 20a (HMG20A, Accession NP_060670.1) is another GAM7776 target gene, herein designated TARGET GENE. HMG20A BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by HMG20A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HMG20A BINDING SITE, designated SEQ ID:5040, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52154] Another function of GAM7776 is therefore inhibition of High-mobility group 20a (HMG20A, Accession NP_060670.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HMG20A.

[52155] HPRN (Accession NP_071938.1) is another GAM7776 target gene, herein designated TARGET GENE. HPRN BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HPRN, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HPRN BINDING SITE, designated SEQ ID:12916, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52156] Another function of GAM7776 is therefore inhibition of HPRN (Accession NP_071938.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HPRN.

[52157] Histamine receptor h4 (HRH4, Accession NP_067637.2) is another GAM7776 target gene, herein designated TARGET GENE. HRH4 BINDING SITE1 and HRH4 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by HRH4, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HRH4 BINDING SITE1 and HRH4 BINDING SITE2, designated SEQ ID:3116 and SEQ

ID:18211 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52158] Another function of GAM7776 is therefore inhibition of Histamine receptor h4 (HRH4, Accession NP_067637.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HRH4.

[52159] Hmt1 hnrnp methyltransferase-like 3 (*s. cerevisiae*) (HRMT1L3, Accession NP_062828.2) is another GAM7776 target gene, herein designated TARGET GENE. HRMT1L3 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by HRMT1L3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HRMT1L3 BINDING SITE, designated SEQ ID:18437, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52160] Another function of GAM7776 is therefore inhibition of Hmt1 hnrnp methyltransferase-like 3 (*s. cerevisiae*) (HRMT1L3, Accession NP_062828.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment

of diseases and clinical conditions associated with HRMT1L3.

[52161] HSD3B7 (Accession NP_079469.2) is another GAM7776 target gene, herein designated TARGET GENE. HSD3B7 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HSD3B7, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HSD3B7 BINDING SITE, designated SEQ ID:2674, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52162] Another function of GAM7776 is therefore inhibition of HSD3B7 (Accession NP_079469.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HSD3B7.

[52163] HSMPP8 (Accession XP_167894.1) is another GAM7776 target gene, herein designated TARGET GENE. HSMPP8 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HSMPP8, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of HSMPP8 BINDING SITE, designated SEQ ID:7797, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52164] Another function of GAM7776 is therefore inhibition of HSMPP8 (Accession XP_167894.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HSMPP8.

[52165] Heat shock 70kda protein 4 (HSPA4, Accession XP_114482.1) is another GAM7776 target gene, herein designated TARGET GENE. HSPA4 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HSPA4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HSPA4 BINDING SITE, designated SEQ ID:15189, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52166] Another function of GAM7776 is therefore inhibition of Heat shock 70kda protein 4 (HSPA4, Accession XP_114482.1) . Accordingly, utilities of GAM7776 include

diagnosis, prevention and treatment of diseases and clinical conditions associated with HSPA4.

[52167] HSPC065 (Accession NP_054876.2) is another GAM7776 target gene, herein designated TARGET GENE. HSPC065 BINDING SITE1 and HSPC065 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by HSPC065, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HSPC065 BINDING SITE1 and HSPC065 BINDING SITE2, designated SEQ ID:713 and SEQ ID:4676 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52168] Another function of GAM7776 is therefore inhibition of HSPC065 (Accession NP_054876.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HSPC065.

[52169] 5-hydroxytryptamine (serotonin) receptor 1d (HTR1D, Accession NP_000855.1) is another GAM7776 target gene, herein designated TARGET GENE. HTR1D BINDING SITE is a target binding site found in the 3' untranslated region of

mRNA encoded by HTR1D, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HTR1D BINDING SITE, designated SEQ ID:2563, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52170] Another function of GAM7776 is therefore inhibition of 5-hydroxytryptamine (serotonin) receptor 1d (HTR1D, Accession NP_000855.1), a gene which belongs to G-protein coupled receptor. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HTR1D.

[52171] The function of HTR1D and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1. Hormonally upregulated neuro-associated kinase (HUNK, Accession NP_055401.1) is another GAM7776 target gene, herein designated TARGET GENE. HUNK BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HUNK, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of HUNK BINDING SITE, designated SEQ ID:17952, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52172] Another function of GAM7776 is therefore inhibition of Hormonally upregulated neu-associated kinase (HUNK, Accession NP_055401.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HUNK.

[52173] Hus1 checkpoint homolog (s. pombe) (HUS1, Accession NP_004498.1) is another GAM7776 target gene, herein designated TARGET GENE. HUS1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HUS1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HUS1 BINDING SITE, designated SEQ ID:14238, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52174] Another function of GAM7776 is therefore inhibition of Hus1 checkpoint homolog (s. pombe) (HUS1, Accession NP_004498.1), a gene which May form DNA damage- re-

sponsive protein complex . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HUS1.

[52175] The function of HUS1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1.Hyaluronoglucosaminidase 4 (HYAL4, Accession NP_036401.1) is another GAM7776 target gene, herein designated TARGET GENE. HYAL4 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by HYAL4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HYAL4 BINDING SITE, designated SEQ ID:2143, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52176] Another function of GAM7776 is therefore inhibition of Hyaluronoglucosaminidase 4 (HYAL4, Accession NP_036401.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HYAL4.

[52177] HYPB (Accession NP_036403.1) is another GAM7776 tar-

get gene, herein designated TARGET GENE. HYPB BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by HYPB, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HYPB BINDING SITE, designated SEQ ID:14422, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52178] Another function of GAM7776 is therefore inhibition of HYPB (Accession NP_036403.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HYPB.

[52179] Intercellular adhesion molecule 1 (cd54), human rhinovirus receptor (ICAM1, Accession NP_000192.1) is another GAM7776 target gene, herein designated TARGET GENE. ICAM1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ICAM1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ICAM1 BINDING SITE, designated SEQ ID:12075, to the nucleotide sequence of GAM7776 RNA,

herein designated GAM RNA, also designated SEQ ID:246.

[52180] Another function of GAM7776 is therefore inhibition of Intercellular adhesion molecule 1 (cd54), human rhinovirus receptor (ICAM1, Accession NP_000192.1), a gene which binds the integrin LFA- 1 (ITGB2) and promotes adhesion; member of the immunoglobulin superfamily and therefore may be associated with Malaria, cerebral, susceptibility to. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Malaria, cerebral, susceptibility to, and of other diseases and clinical conditions associated with ICAM1.

[52181] The function of ICAM1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1.ICK (Accession NP_055735.1) is another GAM7776 target gene, herein designated TARGET GENE. ICK BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by ICK, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ICK BINDING SITE, designated SEQ ID:7385, to the nucleotide sequence of GAM7776 RNA,

herein designated GAM RNA, also designated SEQ ID:246.

[52182] Another function of GAM7776 is therefore inhibition of ICK (Accession NP_055735.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ICK.

[52183] ICK (Accession NP_057597.2) is another GAM7776 target gene, herein designated TARGET GENE. ICK BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by ICK, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ICK BINDING SITE, designated SEQ ID:7385, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52184] Another function of GAM7776 is therefore inhibition of ICK (Accession NP_057597.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ICK.

[52185] Insulin-like growth factor 1 (somatomedin c) (IGF1, Accession NP_000609.1) is another GAM7776 target gene, herein designated TARGET GENE. IGF1 BINDING SITE is a target binding site found in the 3' untranslated region of

mRNA encoded by IGF1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IGF1 BINDING SITE, designated SEQ ID:6279, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52186] Another function of GAM7776 is therefore inhibition of Insulin-like growth factor 1 (somatomedin c) (IGF1, Accession NP_000609.1), a gene which are structurally and functionally related to insulin but have a much higher growth-promoting activity and therefore may be associated with Growth retardation with sensorineural deafness and mental retardation. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Growth retardation with sensorineural deafness and mental retardation, and of other diseases and clinical conditions associated with IGF1.

[52187] The function of IGF1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM66.2.Immunoglobulin mu binding protein 2 (IGHMBP2, Accession NP_002171.1) is another GAM7776

target gene, herein designated TARGET GENE. IGHMBP2 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by IGHMBP2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IGHMBP2 BINDING SITE, designated SEQ ID:17385, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52188] Another function of GAM7776 is therefore inhibition of Immunoglobulin mu binding protein 2 (IGHMBP2, Accession NP_002171.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with IGHMBP2.

[52189] Immunoglobulin lambda-like polypeptide 1 (IGLL1, Accession NP_064455.1) is another GAM7776 target gene, herein designated TARGET GENE. IGLL1 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by IGLL1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IGLL1 BINDING SITE, designated SEQ ID:4573, to the nu-

cleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52190] Another function of GAM7776 is therefore inhibition of Immunoglobulin lambda-like polypeptide 1 (IGLL1, Accession NP_064455.1), a gene which expressed only in pre-b- cells and a special b- cell line (which is surface ig negative). and therefore may be associated with Agammaglobulinemia, autosomal recessive. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Agammaglobulinemia, autosomal recessive, and of other diseases and clinical conditions associated with IGLL1.

[52191] The function of IGLL1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1. Immunoglobulin lambda-like polypeptide 1 (IGLL1, Accession NP_690594.1) is another GAM7776 target gene, herein designated TARGET GENE. IGLL1 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by IGLL1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide se-

quences of IGLL1 BINDING SITE, designated SEQ ID:4573, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52192] Another function of GAM7776 is therefore inhibition of Immunoglobulin lambda-like polypeptide 1 (IGLL1, Accession NP_690594.1), a gene which expressed only in pre-b- cells and a special b- cell line (which is surface ig negative). and therefore may be associated with Agammaglobulinemia, autosomal recessive. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Agammaglobulinemia, autosomal recessive, and of other diseases and clinical conditions associated with IGLL1.

[52193] The function of IGLL1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1. Interleukin 11 (IL11, Accession NP_000632.1) is another GAM7776 target gene, herein designated TARGET GENE. IL11 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by IL11, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the

nucleotide sequences of IL11 BINDING SITE, designated SEQ ID:11544, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52194] Another function of GAM7776 is therefore inhibition of Interleukin 11 (IL11, Accession NP_000632.1), a gene which stimulates the proliferation of hematopoietic stem cells and megakaryocyte progenitor cells and induces megakaryocyte maturation. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with IL11.

[52195] The function of IL11 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM41.1. Interleukin 12 receptor, beta 1 (IL12RB1, Accession NP_714912.1) is another GAM7776 target gene, herein designated TARGET GENE. IL12RB1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by IL12RB1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IL12RB1 BINDING SITE, designated SEQ ID:10756, to the

nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52196] Another function of GAM7776 is therefore inhibition of Interleukin 12 receptor, beta 1 (IL12RB1, Accession NP_714912.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with IL12RB1.

[52197] Interleukin 16 (lymphocyte chemoattractant factor) (IL16, Accession NP_757366.1) is another GAM7776 target gene, herein designated TARGET GENE. IL16 BINDING SITE is a target binding site found in the 5` untranslated region of multiple transcripts of mRNA encoded by IL16, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IL16 BINDING SITE, designated SEQ ID:19554, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52198] Another function of GAM7776 is therefore inhibition of Interleukin 16 (lymphocyte chemoattractant factor) (IL16, Accession NP_757366.1), a gene which modulates T- cell activation. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical

conditions associated with IL16.

[52199] The function of IL16 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM66.1. Interleukin 21 receptor (IL21R, Accession NP_851564.1) is another GAM7776 target gene, herein designated TARGET GENE. IL21R BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by IL21R, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IL21R BINDING SITE, designated SEQ ID:498, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52200] Another function of GAM7776 is therefore inhibition of Interleukin 21 receptor (IL21R, Accession NP_851564.1), a gene which is involved in receptor mediated endocytosis and transduces the mitogenic signals of il- 2. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with IL21R.

[52201] The function of IL21R and its association with various dis-

eases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM69.2. Interleukin 21 receptor (IL21R, Accession NP_851565.1) is another GAM7776 target gene, herein designated TARGET GENE. IL21R BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by IL21R, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IL21R BINDING SITE, designated SEQ ID:498, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52202] Another function of GAM7776 is therefore inhibition of Interleukin 21 receptor (IL21R, Accession NP_851565.1), a gene which is involved in receptor mediated endocytosis and transduces the mitogenic signals of il- 2. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with IL21R.

[52203] The function of IL21R and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM69.2. Interleukin 21 receptor (IL21R, Accession NP_068570.1) is another GAM7776 target gene, herein designated TARGET GENE. IL21R BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by IL21R, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IL21R BINDING SITE, designated SEQ ID:498, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52204] Another function of GAM7776 is therefore inhibition of Interleukin 21 receptor (IL21R, Accession NP_068570.1), a gene which is involved in receptor mediated endocytosis and transduces the mitogenic signals of il- 2. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with IL21R.

[52205] The function of IL21R and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM69.2. Interleukin 28 receptor, alpha (IL28RA, Accession NP_775087.1) is another GAM7776 target gene,

herein designated TARGET GENE. IL28RA BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by IL28RA, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IL28RA BINDING SITE, designated SEQ ID:7046, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52206] Another function of GAM7776 is therefore inhibition of Interleukin 28 receptor, alpha (IL28RA, Accession NP_775087.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with IL28RA.

[52207] Interleukin 28 receptor, alpha (IL28RA, Accession NP_734464.1) is another GAM7776 target gene, herein designated TARGET GENE. IL28RA BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by IL28RA, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IL28RA BINDING SITE, designated SEQ ID:7046, to the nu-

cleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52208] Another function of GAM7776 is therefore inhibition of Interleukin 28 receptor, alpha (IL28RA, Accession NP_734464.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with IL28RA.

[52209] Interleukin 28 receptor, alpha (IL28RA, Accession NP_775088.1) is another GAM7776 target gene, herein designated TARGET GENE. IL28RA BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by IL28RA, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IL28RA BINDING SITE, designated SEQ ID:7046, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52210] Another function of GAM7776 is therefore inhibition of Interleukin 28 receptor, alpha (IL28RA, Accession NP_775088.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with IL28RA.

[52211] Interleukin 5 receptor, alpha (IL5RA, Accession NP_783853.1) is another GAM7776 target gene, herein designated TARGET GENE. IL5RA BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by IL5RA, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IL5RA BINDING SITE, designated SEQ ID:8557, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52212] Another function of GAM7776 is therefore inhibition of Interleukin 5 receptor, alpha (IL5RA, Accession NP_783853.1), a gene which is the receptor for interleukin- 5. the alpha chain binds to il- 5. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with IL5RA.

[52213] The function of IL5RA and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1. Interleukin 5 receptor, alpha (IL5RA, Accession NP_000555.2) is another GAM7776 target gene,

herein designated TARGET GENE. IL5RA BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by IL5RA, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IL5RA BINDING SITE, designated SEQ ID:8557, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52214] Another function of GAM7776 is therefore inhibition of Interleukin 5 receptor, alpha (IL5RA, Accession NP_000555.2), a gene which is the receptor for interleukin- 5. the alpha chain binds to il- 5. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with IL5RA.

[52215] The function of IL5RA and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1. Interleukin enhancer binding factor 3, 90kda (ILF3, Accession NP_036350.2) is another GAM7776 target gene, herein designated TARGET GENE. ILF3 BINDING SITE is a target binding site found in the 3' untranslated re-

gion of multiple transcripts of mRNA encoded by ILF3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ILF3 BINDING SITE, designated SEQ ID:17287, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52216] Another function of GAM7776 is therefore inhibition of Interleukin enhancer binding factor 3, 90kda (ILF3, Accession NP_036350.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ILF3.

[52217] IMPACT (Accession NP_060909.1) is another GAM7776 target gene, herein designated TARGET GENE. IMPACT BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by IMPACT, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IMPACT BINDING SITE, designated SEQ ID:8975, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52218] Another function of GAM7776 is therefore inhibition of

IMPACT (Accession NP_060909.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with IMPACT.

[52219] INHBE (Accession NP_113667.1) is another GAM7776 target gene, herein designated TARGET GENE. INHBE BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by INHBE, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of INHBE BINDING SITE, designated SEQ ID:16283, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52220] Another function of GAM7776 is therefore inhibition of INHBE (Accession NP_113667.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with INHBE.

[52221] Indolethylamine n-methyltransferase (INMT, Accession NP_006765.3) is another GAM7776 target gene, herein designated TARGET GENE. INMT BINDING SITE1 and INMT BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by INMT, corresponding to target binding sites such as BINDING SITE I, BINDING

SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of INMT BINDING SITE1 and INMT BINDING SITE2, designated SEQ ID:9149 and SEQ ID:11523 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52222] Another function of GAM7776 is therefore inhibition of Indolethylamine n-methyltransferase (INMT, Accession NP_006765.3) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with INMT.

[52223] Interferon regulatory factor 4 (IRF4, Accession NP_002451.1) is another GAM7776 target gene, herein designated TARGET GENE. IRF4 BINDING SITE1 and IRF4 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by IRF4, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IRF4 BINDING SITE1 and IRF4 BINDING SITE2, designated SEQ ID:2698 and SEQ ID:1517 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52224] Another function of GAM7776 is therefore inhibition of Interferon regulatory factor 4 (IRF4, Accession NP_002451.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with IRF4.

[52225] Integrin, alpha x (antigen cd11c (p150), alpha polypeptide) (ITGAX, Accession NP_000878.1) is another GAM7776 target gene, herein designated TARGET GENE. ITGAX BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ITGAX, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ITGAX BINDING SITE, designated SEQ ID:559, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52226] Another function of GAM7776 is therefore inhibition of Integrin, alpha x (antigen cd11c (p150), alpha polypeptide) (ITGAX, Accession NP_000878.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ITGAX.

[52227] Janus kinase 3 (a protein tyrosine kinase, leukocyte) (JAK3,

Accession NP_000206.1) is another GAM7776 target gene, herein designated TARGET GENE. JAK3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by JAK3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of JAK3 BINDING SITE, designated SEQ ID:18060, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52228] Another function of GAM7776 is therefore inhibition of Janus kinase 3 (a protein tyrosine kinase, leukocyte) (JAK3, Accession NP_000206.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with JAK3.

[52229] JM11 (Accession NP_296375.1) is another GAM7776 target gene, herein designated TARGET GENE. JM11 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by JM11, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of JM11 BINDING SITE, designated SEQ ID:10197, to the nucleotide se-

quence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52230] Another function of GAM7776 is therefore inhibition of JM11 (Accession NP_296375.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with JM11.

[52231] Jerky homolog (mouse) (JRK, Accession NP_003715.1) is another GAM7776 target gene, herein designated TARGET GENE. JRK BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by JRK, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of JRK BINDING SITE, designated SEQ ID:3927, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52232] Another function of GAM7776 is therefore inhibition of Jerky homolog (mouse) (JRK, Accession NP_003715.1), a gene which might function as a DNA- binding protein. and therefore may be associated with Absence epilepsy. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Absence epilepsy, and of other diseases and clinical conditions associated with JRK.

[52233] The function of JRK and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM65.2. Potassium inwardly-rectifying channel, subfamily j, member 11 (KCNJ11, Accession NP_000516.2) is another GAM7776 target gene, herein designated TARGET GENE. KCNJ11 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by KCNJ11, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KCNJ11 BINDING SITE, designated SEQ ID:15049, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52234] Another function of GAM7776 is therefore inhibition of Potassium inwardly-rectifying channel, subfamily j, member 11 (KCNJ11, Accession NP_000516.2), a gene which is controlled by g proteins. inward rectifier K^+ channels are characterized by a greater tendency to allow potassium to flow into the cell rather than out of it. and therefore is associated with Persistent hyperinsulinemic hypoglycemia of infancy. Accordingly, utilities of GAM7776 include diagno-

sis, prevention and treatment of Persistent hyperinsulinemic hypoglycemia of infancy, and of other diseases and clinical conditions associated with KCNJ11.

[52235] The function of KCNJ11 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1. Potassium inwardly-rectifying channel, subfamily j, member 16 (KCNJ16, Accession NP_061128.1) is another GAM7776 target gene, herein designated TARGET GENE. KCNJ16 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by KCNJ16, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KCNJ16 BINDING SITE, designated SEQ ID:2456, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52236] Another function of GAM7776 is therefore inhibition of Potassium inwardly-rectifying channel, subfamily j, member 16 (KCNJ16, Accession NP_061128.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated

with KCNJ16.

[52237] Potassium inwardly-rectifying channel, subfamily j, member 16 (KCNJ16, Accession NP_733938.1) is another GAM7776 target gene, herein designated TARGET GENE. KCNJ16 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by KCNJ16, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KCNJ16 BINDING SITE, designated SEQ ID:2456, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52238] Another function of GAM7776 is therefore inhibition of Potassium inwardly-rectifying channel, subfamily j, member 16 (KCNJ16, Accession NP_733938.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KCNJ16.

[52239] Potassium inwardly-rectifying channel, subfamily j, member 16 (KCNJ16, Accession NP_733937.1) is another GAM7776 target gene, herein designated TARGET GENE. KCNJ16 BINDING SITE is a target binding site found in the

3` untranslated region of multiple transcripts of mRNA encoded by KCNJ16, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KCNJ16 BINDING SITE, designated SEQ ID:2456, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52240] Another function of GAM7776 is therefore inhibition of Potassium inwardly-rectifying channel, subfamily j, member 16 (KCNJ16, Accession NP_733937.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KCNJ16.

[52241] KENAE (Accession NP_789786.1) is another GAM7776 target gene, herein designated TARGET GENE. KENAE BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by KENAE, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KENAE BINDING SITE, designated SEQ ID:14862, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA,

also designated SEQ ID:246.

[52242] Another function of GAM7776 is therefore inhibition of KENAE (Accession NP_789786.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KENAE.

[52243] KIAA0063 (Accession NP_055691.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA0063 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0063, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0063 BINDING SITE, designated SEQ ID:5884, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52244] Another function of GAM7776 is therefore inhibition of KIAA0063 (Accession NP_055691.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0063.

[52245] KIAA0082 (Accession NP_055865.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA0082 BINDING SITE is a target binding site found in the 3' un-

translated region of mRNA encoded by KIAA0082, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0082 BINDING SITE, designated SEQ ID:18751, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52246] Another function of GAM7776 is therefore inhibition of KIAA0082 (Accession NP_055865.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0082.

[52247] KIAA0087 (Accession NP_055584.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA0087 BINDING SITE1 and KIAA0087 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by KIAA0087, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0087 BINDING SITE1 and KIAA0087 BINDING SITE2, designated SEQ ID:7956 and SEQ ID:10179 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also design-

nated SEQ ID:246.

[52248] Another function of GAM7776 is therefore inhibition of KIAA0087 (Accession NP_055584.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0087.

[52249] KIAA0117 (Accession XP_290939.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA0117 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0117, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0117 BINDING SITE, designated SEQ ID:9255, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52250] Another function of GAM7776 is therefore inhibition of KIAA0117 (Accession XP_290939.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0117.

[52251] KIAA0182 (Accession XP_050495.4) is another GAM7776 target gene, herein designated TARGET GENE. KIAA0182

BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0182, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0182 BINDING SITE, designated SEQ ID:2218, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52252] Another function of GAM7776 is therefore inhibition of KIAA0182 (Accession XP_050495.4) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0182.

[52253] KIAA0186 (Accession NP_066545.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA0186 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0186, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0186 BINDING SITE, designated SEQ ID:2625, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52254] Another function of GAM7776 is therefore inhibition of KIAA0186 (Accession NP_066545.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0186.

[52255] KIAA0205 (Accession NP_055688.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA0205 BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by KIAA0205, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0205 BINDING SITE, designated SEQ ID:3429, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52256] Another function of GAM7776 is therefore inhibition of KIAA0205 (Accession NP_055688.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0205.

[52257] KIAA0237 (Accession NP_055562.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA0237 BINDING SITE is a target binding site found in the 3` un-

translated region of mRNA encoded by KIAA0237, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0237 BINDING SITE, designated SEQ ID:17386, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52258] Another function of GAM7776 is therefore inhibition of KIAA0237 (Accession NP_055562.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0237.

[52259] KIAA0295 (Accession XP_042833.2) is another GAM7776 target gene, herein designated TARGET GENE. KIAA0295 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0295, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0295 BINDING SITE, designated SEQ ID:10742, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52260] Another function of GAM7776 is therefore inhibition of

KIAA0295 (Accession XP_042833.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0295.

[52261] KIAA0435 (Accession NP_055616.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA0435 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by KIAA0435, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0435 BINDING SITE, designated SEQ ID:5041, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52262] Another function of GAM7776 is therefore inhibition of KIAA0435 (Accession NP_055616.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0435.

[52263] KIAA0446 (Accession XP_044155.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA0446 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by KIAA0446, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0446 BINDING SITE, designated SEQ ID:1475, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52264] Another function of GAM7776 is therefore inhibition of KIAA0446 (Accession XP_044155.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0446.

[52265] KIAA0459 (Accession XP_027862.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA0459 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0459, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0459 BINDING SITE, designated SEQ ID:4531, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52266] Another function of GAM7776 is therefore inhibition of KIAA0459 (Accession XP_027862.1) . Accordingly, utilities

of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0459.

[52267] KIAA0469 (Accession NP_055666.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA0469 BINDING SITE1 and KIAA0469 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by KIAA0469, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0469 BINDING SITE1 and KIAA0469 BINDING SITE2, designated SEQ ID:9147 and SEQ ID:9493 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52268] Another function of GAM7776 is therefore inhibition of KIAA0469 (Accession NP_055666.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0469.

[52269] KIAA0475 (Accession NP_055679.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA0475 BINDING SITE is a target binding site found in the 3' un-

translated region of mRNA encoded by KIAA0475, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0475 BINDING SITE, designated SEQ ID:16940, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52270] Another function of GAM7776 is therefore inhibition of KIAA0475 (Accession NP_055679.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0475.

[52271] KIAA0493 (Accession XP_034717.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA0493 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by KIAA0493, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0493 BINDING SITE, designated SEQ ID:17206, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52272] Another function of GAM7776 is therefore inhibition of

KIAA0493 (Accession XP_034717.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0493.

[52273] KIAA0495 (Accession XP_031397.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA0495 BINDING SITE1 and KIAA0495 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by KIAA0495, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0495 BINDING SITE1 and KIAA0495 BINDING SITE2, designated SEQ ID:14759 and SEQ ID:5442 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52274] Another function of GAM7776 is therefore inhibition of KIAA0495 (Accession XP_031397.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0495.

[52275] KIAA0513 (Accession NP_055547.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA0513

BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0513, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0513 BINDING SITE, designated SEQ ID:3931, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52276] Another function of GAM7776 is therefore inhibition of KIAA0513 (Accession NP_055547.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0513.

[52277] KIAA0527 (Accession XP_171054.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA0527 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0527, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0527 BINDING SITE, designated SEQ ID:19745, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52278] Another function of GAM7776 is therefore inhibition of KIAA0527 (Accession XP_171054.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0527.

[52279] KIAA0532 (Accession XP_047659.6) is another GAM7776 target gene, herein designated TARGET GENE. KIAA0532 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0532, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0532 BINDING SITE, designated SEQ ID:12455, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52280] Another function of GAM7776 is therefore inhibition of KIAA0532 (Accession XP_047659.6) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0532.

[52281] KIAA0555 (Accession NP_055605.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA0555 BINDING SITE is a target binding site found in the 3' un-

translated region of mRNA encoded by KIAA0555, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0555 BINDING SITE, designated SEQ ID:5555, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52282] Another function of GAM7776 is therefore inhibition of KIAA0555 (Accession NP_055605.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0555.

[52283] KIAA0561 (Accession XP_038150.2) is another GAM7776 target gene, herein designated TARGET GENE. KIAA0561 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0561, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0561 BINDING SITE, designated SEQ ID:9629, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52284] Another function of GAM7776 is therefore inhibition of

KIAA0561 (Accession XP_038150.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0561.

[52285] KIAA0562 (Accession NP_055519.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA0562 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0562, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0562 BINDING SITE, designated SEQ ID:16544, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52286] Another function of GAM7776 is therefore inhibition of KIAA0562 (Accession NP_055519.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0562.

[52287] KIAA0563 (Accession NP_055649.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA0563 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by KIAA0563, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0563 BINDING SITE, designated SEQ ID:16377, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52288] Another function of GAM7776 is therefore inhibition of KIAA0563 (Accession NP_055649.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0563.

[52289] KIAA0682 (Accession NP_055667.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA0682 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by KIAA0682, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0682 BINDING SITE, designated SEQ ID:6522, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52290] Another function of GAM7776 is therefore inhibition of

KIAA0682 (Accession NP_055667.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0682.

[52291] KIAA0804 (Accession XP_291080.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA0804 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0804, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0804 BINDING SITE, designated SEQ ID:14656, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52292] Another function of GAM7776 is therefore inhibition of KIAA0804 (Accession XP_291080.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0804.

[52293] KIAA0831 (Accession NP_055739.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA0831 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0831, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0831 BINDING SITE, designated SEQ ID:3260, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52294] Another function of GAM7776 is therefore inhibition of KIAA0831 (Accession NP_055739.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0831.

[52295] KIAA0841 (Accession XP_049237.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA0841 BINDING SITE1 and KIAA0841 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by KIAA0841, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0841 BINDING SITE1 and KIAA0841 BINDING SITE2, designated SEQ ID:8185 and SEQ ID:5490 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52296] Another function of GAM7776 is therefore inhibition of KIAA0841 (Accession XP_049237.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0841.

[52297] KIAA0861 (Accession NP_055893.2) is another GAM7776 target gene, herein designated TARGET GENE. KIAA0861 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0861, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0861 BINDING SITE, designated SEQ ID:2153, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52298] Another function of GAM7776 is therefore inhibition of KIAA0861 (Accession NP_055893.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0861.

[52299] KIAA0889 (Accession NP_056192.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA0889 BINDING SITE is a target binding site found in the 3' un-

translated region of multiple transcripts of mRNA encoded by KIAA0889, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0889 BINDING SITE, designated SEQ ID:13271, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52300] Another function of GAM7776 is therefore inhibition of KIAA0889 (Accession NP_056192.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0889.

[52301] KIAA0924 (Accession NP_055712.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA0924 BINDING SITE1 and KIAA0924 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by KIAA0924, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0924 BINDING SITE1 and KIAA0924 BINDING SITE2, designated SEQ ID:13297 and SEQ ID:7655 respectively, to the nucleotide sequence of

GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52302] Another function of GAM7776 is therefore inhibition of KIAA0924 (Accession NP_055712.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0924.

[52303] KIAA0931 (Accession XP_041191.2) is another GAM7776 target gene, herein designated TARGET GENE. KIAA0931 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0931, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0931 BINDING SITE, designated SEQ ID:14272, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52304] Another function of GAM7776 is therefore inhibition of KIAA0931 (Accession XP_041191.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0931.

[52305] KIAA0935 (Accession XP_052620.6) is another GAM7776

target gene, herein designated TARGET GENE. KIAA0935 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0935, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0935 BINDING SITE, designated SEQ ID:11958, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52306] Another function of GAM7776 is therefore inhibition of KIAA0935 (Accession XP_052620.6). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0935.

[52307] KIAA0962 (Accession XP_290942.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA0962 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0962, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0962 BINDING SITE, designated SEQ ID:8976, to the nucleotide sequence of GAM7776 RNA, herein designated

GAM RNA, also designated SEQ ID:246.

[52308] Another function of GAM7776 is therefore inhibition of KIAA0962 (Accession XP_290942.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0962.

[52309] KIAA1002 (Accession XP_290584.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA1002 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by KIAA1002, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1002 BINDING SITE, designated SEQ ID:12518, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52310] Another function of GAM7776 is therefore inhibition of KIAA1002 (Accession XP_290584.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1002.

[52311] KIAA1040 (Accession XP_051091.3) is another GAM7776 target gene, herein designated TARGET GENE. KIAA1040

BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1040, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1040 BINDING SITE, designated SEQ ID:11846, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52312] Another function of GAM7776 is therefore inhibition of KIAA1040 (Accession XP_051091.3) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1040.

[52313] KIAA1041 (Accession NP_055762.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA1041 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1041, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1041 BINDING SITE, designated SEQ ID:3653, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52314] Another function of GAM7776 is therefore inhibition of KIAA1041 (Accession NP_055762.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1041.

[52315] KIAA1054 (Accession XP_043493.5) is another GAM7776 target gene, herein designated TARGET GENE. KIAA1054 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1054, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1054 BINDING SITE, designated SEQ ID:14832, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52316] Another function of GAM7776 is therefore inhibition of KIAA1054 (Accession XP_043493.5) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1054.

[52317] KIAA1115 (Accession NP_055746.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA1115 BINDING SITE is a target binding site found in the 3' un-

translated region of mRNA encoded by KIAA1115, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1115 BINDING SITE, designated SEQ ID:9842, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52318] Another function of GAM7776 is therefore inhibition of KIAA1115 (Accession NP_055746.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1115.

[52319] KIAA1128 (Accession NP_061872.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA1128 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1128, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1128 BINDING SITE, designated SEQ ID:5783, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52320] Another function of GAM7776 is therefore inhibition of

KIAA1128 (Accession NP_061872.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1128.

[52321] KIAA1143 (Accession XP_044014.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA1143 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1143, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1143 BINDING SITE, designated SEQ ID:7385, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52322] Another function of GAM7776 is therefore inhibition of KIAA1143 (Accession XP_044014.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1143.

[52323] KIAA1145 (Accession NP_065749.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA1145 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1145, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1145 BINDING SITE, designated SEQ ID:17532, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52324] Another function of GAM7776 is therefore inhibition of KIAA1145 (Accession NP_065749.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1145.

[52325] KIAA1155 (Accession XP_030864.2) is another GAM7776 target gene, herein designated TARGET GENE. KIAA1155 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1155, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1155 BINDING SITE, designated SEQ ID:2664, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52326] Another function of GAM7776 is therefore inhibition of KIAA1155 (Accession XP_030864.2) . Accordingly, utilities

of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1155.

[52327] KIAA1170 (Accession XP_045907.2) is another GAM7776 target gene, herein designated TARGET GENE. KIAA1170 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1170, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1170 BINDING SITE, designated SEQ ID:10162, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52328] Another function of GAM7776 is therefore inhibition of KIAA1170 (Accession XP_045907.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1170.

[52329] KIAA1185 (Accession NP_065761.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA1185 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1185, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1185 BINDING SITE, designated SEQ ID:5755, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52330] Another function of GAM7776 is therefore inhibition of KIAA1185 (Accession NP_065761.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1185.

[52331] KIAA1193 (Accession XP_041843.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA1193 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1193, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1193 BINDING SITE, designated SEQ ID:17517, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52332] Another function of GAM7776 is therefore inhibition of KIAA1193 (Accession XP_041843.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment

of diseases and clinical conditions associated with KIAA1193.

[52333] KIAA1198 (Accession NP_065765.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA1198 BINDING SITE1 through KIAA1198 BINDING SITE5 are target binding sites found in untranslated regions of mRNA encoded by KIAA1198, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1198 BINDING SITE1 through KIAA1198 BINDING SITE5, designated SEQ ID:13749, SEQ ID:16471, SEQ ID:12389, SEQ ID:16088 and SEQ ID:12478 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52334] Another function of GAM7776 is therefore inhibition of KIAA1198 (Accession NP_065765.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1198.

[52335] KIAA1209 (Accession XP_027307.2) is another GAM7776 target gene, herein designated TARGET GENE. KIAA1209 BINDING SITE is a target binding site found in the 3' un-

translated region of mRNA encoded by KIAA1209, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1209 BINDING SITE, designated SEQ ID:8271, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52336] Another function of GAM7776 is therefore inhibition of KIAA1209 (Accession XP_027307.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1209.

[52337] KIAA1210 (Accession XP_172801.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA1210 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1210, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1210 BINDING SITE, designated SEQ ID:9144, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52338] Another function of GAM7776 is therefore inhibition of

KIAA1210 (Accession XP_172801.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1210.

[52339] KIAA1257 (Accession XP_031577.2) is another GAM7776 target gene, herein designated TARGET GENE. KIAA1257 BINDING SITE1 and KIAA1257 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by KIAA1257, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1257 BINDING SITE1 and KIAA1257 BINDING SITE2, designated SEQ ID:11523 and SEQ ID:9032 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52340] Another function of GAM7776 is therefore inhibition of KIAA1257 (Accession XP_031577.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1257.

[52341] KIAA1268 (Accession XP_291055.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA1268

BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1268, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1268 BINDING SITE, designated SEQ ID:3236, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52342] Another function of GAM7776 is therefore inhibition of KIAA1268 (Accession XP_291055.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1268.

[52343] KIAA1273 (Accession XP_300760.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA1273 BINDING SITE1 and KIAA1273 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by KIAA1273, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1273 BINDING SITE1 and KIAA1273 BINDING SITE2, designated SEQ ID:4555 and SEQ ID:7374 respectively, to the nucleotide sequence of

GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52344] Another function of GAM7776 is therefore inhibition of KIAA1273 (Accession XP_300760.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1273.

[52345] KIAA1276 (Accession XP_039169.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA1276 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by KIAA1276, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1276 BINDING SITE, designated SEQ ID:1905, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52346] Another function of GAM7776 is therefore inhibition of KIAA1276 (Accession XP_039169.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1276.

[52347] KIAA1287 (Accession NP_065799.1) is another GAM7776

target gene, herein designated TARGET GENE. KIAA1287 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1287, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1287 BINDING SITE, designated SEQ ID:9573, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52348] Another function of GAM7776 is therefore inhibition of KIAA1287 (Accession NP_065799.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1287.

[52349] KIAA1393 (Accession XP_050793.2) is another GAM7776 target gene, herein designated TARGET GENE. KIAA1393 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1393, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1393 BINDING SITE, designated SEQ ID:10123, to the nucleotide sequence of GAM7776 RNA, herein designated

GAM RNA, also designated SEQ ID:246.

[52350] Another function of GAM7776 is therefore inhibition of KIAA1393 (Accession XP_050793.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1393.

[52351] KIAA1443 (Accession NP_065885.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA1443 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1443, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1443 BINDING SITE, designated SEQ ID:15171, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52352] Another function of GAM7776 is therefore inhibition of KIAA1443 (Accession NP_065885.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1443.

[52353] KIAA1456 (Accession XP_040100.3) is another GAM7776 target gene, herein designated TARGET GENE. KIAA1456

BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1456, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1456 BINDING SITE, designated SEQ ID:5529, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52354] Another function of GAM7776 is therefore inhibition of KIAA1456 (Accession XP_040100.3) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1456.

[52355] KIAA1463 (Accession XP_051160.2) is another GAM7776 target gene, herein designated TARGET GENE. KIAA1463 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1463, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1463 BINDING SITE, designated SEQ ID:1667, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52356] Another function of GAM7776 is therefore inhibition of KIAA1463 (Accession XP_051160.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1463.

[52357] KIAA1465 (Accession XP_027396.4) is another GAM7776 target gene, herein designated TARGET GENE. KIAA1465 BINDING SITE1 and KIAA1465 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by KIAA1465, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1465 BINDING SITE1 and KIAA1465 BINDING SITE2, designated SEQ ID:18838 and SEQ ID:18992 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52358] Another function of GAM7776 is therefore inhibition of KIAA1465 (Accession XP_027396.4) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1465.

[52359] KIAA1493 (Accession XP_034415.1) is another GAM7776

target gene, herein designated TARGET GENE. KIAA1493 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1493, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1493 BINDING SITE, designated SEQ ID:15045, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52360] Another function of GAM7776 is therefore inhibition of KIAA1493 (Accession XP_034415.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1493.

[52361] KIAA1508 (Accession XP_290952.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA1508 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1508, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1508 BINDING SITE, designated SEQ ID:8820, to the nucleotide sequence of GAM7776 RNA, herein designated

GAM RNA, also designated SEQ ID:246.

[52362] Another function of GAM7776 is therefore inhibition of KIAA1508 (Accession XP_290952.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1508.

[52363] KIAA1518 (Accession XP_170889.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA1518 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by KIAA1518, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1518 BINDING SITE, designated SEQ ID:13383, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52364] Another function of GAM7776 is therefore inhibition of KIAA1518 (Accession XP_170889.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1518.

[52365] KIAA1530 (Accession XP_042661.5) is another GAM7776

target gene, herein designated TARGET GENE. KIAA1530 BINDING SITE1 and KIAA1530 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by KIAA1530, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1530 BINDING SITE1 and KIAA1530 BINDING SITE2, designated SEQ ID:4028 and SEQ ID:15284 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52366] Another function of GAM7776 is therefore inhibition of KIAA1530 (Accession XP_042661.5) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1530.

[52367] KIAA1550 (Accession XP_039393.3) is another GAM7776 target gene, herein designated TARGET GENE. KIAA1550 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1550, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

KIAA1550 BINDING SITE, designated SEQ ID:3790, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52368] Another function of GAM7776 is therefore inhibition of KIAA1550 (Accession XP_039393.3) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1550.

[52369] KIAA1559 (Accession XP_054472.2) is another GAM7776 target gene, herein designated TARGET GENE. KIAA1559 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1559, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1559 BINDING SITE, designated SEQ ID:4029, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52370] Another function of GAM7776 is therefore inhibition of KIAA1559 (Accession XP_054472.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1559.

[52371] KIAA1571 (Accession XP_027744.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA1571 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1571, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1571 BINDING SITE, designated SEQ ID:14154, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52372] Another function of GAM7776 is therefore inhibition of KIAA1571 (Accession XP_027744.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1571.

[52373] KIAA1615 (Accession NP_066002.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA1615 BINDING SITE1 and KIAA1615 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by KIAA1615, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1615 BINDING SITE1 and

KIAA1615 BINDING SITE2, designated SEQ ID:10111 and SEQ ID:8549 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52374] Another function of GAM7776 is therefore inhibition of KIAA1615 (Accession NP_066002.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1615.

[52375] KIAA1671 (Accession XP_037809.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA1671 BINDING SITE1 and KIAA1671 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by KIAA1671, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1671 BINDING SITE1 and KIAA1671 BINDING SITE2, designated SEQ ID:17191 and SEQ ID:7194 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52376] Another function of GAM7776 is therefore inhibition of KIAA1671 (Accession XP_037809.1) . Accordingly, utilities

of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1671.

[52377] KIAA1712 (Accession XP_041497.2) is another GAM7776 target gene, herein designated TARGET GENE. KIAA1712 BINDING SITE1 and KIAA1712 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by KIAA1712, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1712 BINDING SITE1 and KIAA1712 BINDING SITE2, designated SEQ ID:14165 and SEQ ID:1142 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52378] Another function of GAM7776 is therefore inhibition of KIAA1712 (Accession XP_041497.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1712.

[52379] KIAA1712 (Accession XP_041497.2) is another GAM7776 target gene, herein designated TARGET GENE. KIAA1712 BINDING SITE1 and KIAA1712 BINDING SITE2 are target

binding sites found in untranslated regions of multiple transcripts of mRNA encoded by KIAA1712, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1712 BINDING SITE1 and KIAA1712 BINDING SITE2, designated SEQ ID:1142 and SEQ ID:14165 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52380] Another function of GAM7776 is therefore inhibition of KIAA1712 (Accession XP_041497.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1712.

[52381] KIAA1724 (Accession XP_040280.2) is another GAM7776 target gene, herein designated TARGET GENE. KIAA1724 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by KIAA1724, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1724 BINDING SITE, designated SEQ ID:14630, to the nucleotide sequence of GAM7776 RNA, herein designated

GAM RNA, also designated SEQ ID:246.

[52382] Another function of GAM7776 is therefore inhibition of KIAA1724 (Accession XP_040280.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1724.

[52383] KIAA1737 (Accession NP_219494.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA1737 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1737, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1737 BINDING SITE, designated SEQ ID:10602, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52384] Another function of GAM7776 is therefore inhibition of KIAA1737 (Accession NP_219494.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1737.

[52385] KIAA1775 (Accession NP_149091.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA1775

BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1775, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1775 BINDING SITE, designated SEQ ID:1618, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52386] Another function of GAM7776 is therefore inhibition of KIAA1775 (Accession NP_149091.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1775.

[52387] KIAA1784 (Accession NP_115820.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA1784 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1784, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1784 BINDING SITE, designated SEQ ID:11058, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52388] Another function of GAM7776 is therefore inhibition of KIAA1784 (Accession NP_115820.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1784.

[52389] KIAA1822 (Accession XP_041566.2) is another GAM7776 target gene, herein designated TARGET GENE. KIAA1822 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1822, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1822 BINDING SITE, designated SEQ ID:10095, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52390] Another function of GAM7776 is therefore inhibition of KIAA1822 (Accession XP_041566.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1822.

[52391] KIAA1827 (Accession XP_290834.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA1827 BINDING SITE1 and KIAA1827 BINDING SITE2 are target

binding sites found in untranslated regions of mRNA encoded by KIAA1827, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1827 BINDING SITE1 and KIAA1827 BINDING SITE2, designated SEQ ID:2143 and SEQ ID:12636 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52392] Another function of GAM7776 is therefore inhibition of KIAA1827 (Accession XP_290834.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1827.

[52393] KIAA1829 (Accession XP_030378.2) is another GAM7776 target gene, herein designated TARGET GENE. KIAA1829 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1829, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1829 BINDING SITE, designated SEQ ID:14863, to the nucleotide sequence of GAM7776 RNA, herein designated

GAM RNA, also designated SEQ ID:246.

[52394] Another function of GAM7776 is therefore inhibition of KIAA1829 (Accession XP_030378.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1829.

[52395] KIAA1836 (Accession XP_114087.2) is another GAM7776 target gene, herein designated TARGET GENE. KIAA1836 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1836, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1836 BINDING SITE, designated SEQ ID:12627, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52396] Another function of GAM7776 is therefore inhibition of KIAA1836 (Accession XP_114087.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1836.

[52397] KIAA1853 (Accession XP_045184.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA1853

BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1853, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1853 BINDING SITE, designated SEQ ID:19095, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52398] Another function of GAM7776 is therefore inhibition of KIAA1853 (Accession XP_045184.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1853.

[52399] KIAA1904 (Accession XP_056282.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA1904 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1904, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1904 BINDING SITE, designated SEQ ID:16492, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52400] Another function of GAM7776 is therefore inhibition of KIAA1904 (Accession XP_056282.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1904.

[52401] KIAA1922 (Accession XP_057040.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA1922 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by KIAA1922, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1922 BINDING SITE, designated SEQ ID:7553, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52402] Another function of GAM7776 is therefore inhibition of KIAA1922 (Accession XP_057040.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1922.

[52403] KIAA1924 (Accession NP_694971.2) is another GAM7776 target gene, herein designated TARGET GENE. KIAA1924 BINDING SITE1 and KIAA1924 BINDING SITE2 are target

binding sites found in untranslated regions of mRNA encoded by KIAA1924, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1924 BINDING SITE1 and KIAA1924 BINDING SITE2, designated SEQ ID:8341 and SEQ ID:1857 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52404] Another function of GAM7776 is therefore inhibition of KIAA1924 (Accession NP_694971.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1924.

[52405] KIAA1937 (Accession XP_057107.3) is another GAM7776 target gene, herein designated TARGET GENE. KIAA1937 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by KIAA1937, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1937 BINDING SITE, designated SEQ ID:2983, to the nucleotide sequence of GAM7776 RNA, herein designated

GAM RNA, also designated SEQ ID:246.

[52406] Another function of GAM7776 is therefore inhibition of KIAA1937 (Accession XP_057107.3) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1937.

[52407] KIAA1971 (Accession XP_058720.4) is another GAM7776 target gene, herein designated TARGET GENE. KIAA1971 BINDING SITE1 and KIAA1971 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by KIAA1971, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1971 BINDING SITE1 and KIAA1971 BINDING SITE2, designated SEQ ID:6902 and SEQ ID:11506 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52408] Another function of GAM7776 is therefore inhibition of KIAA1971 (Accession XP_058720.4) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1971.

[52409] KIAA1987 (Accession XP_113870.1) is another GAM7776 target gene, herein designated TARGET GENE. KIAA1987 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by KIAA1987, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1987 BINDING SITE, designated SEQ ID:7554, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52410] Another function of GAM7776 is therefore inhibition of KIAA1987 (Accession XP_113870.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1987.

[52411] KIAA2028 (Accession XP_059415.2) is another GAM7776 target gene, herein designated TARGET GENE. KIAA2028 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA2028, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA2028 BINDING SITE, designated SEQ ID:12100, to the

nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52412] Another function of GAM7776 is therefore inhibition of KIAA2028 (Accession XP_059415.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA2028.

[52413] Kruppel-like factor 12 (KLF12, Accession NP_009180.3) is another GAM7776 target gene, herein designated TARGET GENE. KLF12 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by KLF12, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KLF12 BINDING SITE, designated SEQ ID:1127, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52414] Another function of GAM7776 is therefore inhibition of Kruppel-like factor 12 (KLF12, Accession NP_009180.3) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KLF12.

[52415] Killer cell lectin-like receptor subfamily d, member 1 (KLRD1, Accession NP_031360.1) is another GAM7776 target gene, herein designated TARGET GENE. KLRD1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by KLRD1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KLRD1 BINDING SITE, designated SEQ ID:2353, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52416] Another function of GAM7776 is therefore inhibition of Killer cell lectin-like receptor subfamily d, member 1 (KLRD1, Accession NP_031360.1), a gene which is a receptor for the recognition of mhc class i hla- e molecules by nk cells and some cytotoxic t- cells. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KLRD1.

[52417] The function of KLRD1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM189.1.Killer cell lectin-like receptor subfamily d, member 1 (KLRD1, Accession NP_002253.1) is another GAM7776 target gene, herein designated TARGET GENE. KLRD1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by KLRD1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KLRD1 BINDING SITE, designated SEQ ID:2353, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52418] Another function of GAM7776 is therefore inhibition of Killer cell lectin-like receptor subfamily d, member 1 (KLRD1, Accession NP_002253.1), a gene which is a receptor for the recognition of mhc class i hla- e molecules by nk cells and some cytotoxic t- cells. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KLRD1.

[52419] The function of KLRD1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM189.1.Kynurenine 3-monooxygenase (kynurenine 3-hydroxylase) (KMO, Accession NP_003670.1) is another GAM7776 target gene, herein designated TARGET GENE. KMO BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KMO, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KMO BINDING SITE, designated SEQ ID:6338, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52420] Another function of GAM7776 is therefore inhibition of Kynurenine 3-monooxygenase (kynurenine 3-hydroxylase) (KMO, Accession NP_003670.1), a gene which may play a role in encephalic photoreception. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KMO.

[52421] The function of KMO and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1.Lysosomal-associated membrane protein 3 (LAMP3, Accession NP_055213.1) is another GAM7776

target gene, herein designated TARGET GENE. LAMP3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LAMP3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LAMP3 BINDING SITE, designated SEQ ID:17760, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52422] Another function of GAM7776 is therefore inhibition of Lysosomal-associated membrane protein 3 (LAMP3, Accession NP_055213.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LAMP3.

[52423] Leucyl-trna synthetase (LARS, Accession NP_064502.8) is another GAM7776 target gene, herein designated TARGET GENE. LARS BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LARS, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LARS BINDING SITE, designated SEQ ID:2620, to the nucleotide sequence of GAM7776 RNA, herein des-

ignated GAM RNA, also designated SEQ ID:246.

- [52424] Another function of GAM7776 is therefore inhibition of Leucyl-trna synthetase (LARS, Accession NP_064502.8) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LARS.
- [52425] Lim and sh3 protein 1 (LASP1, Accession NP_006139.1) is another GAM7776 target gene, herein designated TARGET GENE. LASP1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LASP1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LASP1 BINDING SITE, designated SEQ ID:17709, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.
- [52426] Another function of GAM7776 is therefore inhibition of Lim and sh3 protein 1 (LASP1, Accession NP_006139.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LASP1.
- [52427] Lipocalin 7 (LCN7, Accession NP_071447.1) is another GAM7776 target gene, herein designated TARGET GENE.

LCN7 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LCN7, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LCN7 BINDING SITE, designated SEQ ID:15937, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52428] Another function of GAM7776 is therefore inhibition of Lipocalin 7 (LCN7, Accession NP_071447.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LCN7.

[52429] Leucine zipper-ef-hand containing transmembrane protein 1 (LETM1, Accession NP_036450.1) is another GAM7776 target gene, herein designated TARGET GENE. LETM1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LETM1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LETM1 BINDING SITE, designated SEQ ID:18695, to the nucleotide sequence of GAM7776 RNA, herein designated

GAM RNA, also designated SEQ ID:246.

- [52430] Another function of GAM7776 is therefore inhibition of Leucine zipper-ef-hand containing transmembrane protein 1 (LETM1, Accession NP_036450.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LETM1.
- [52431] LGP2 (Accession NP_077024.1) is another GAM7776 target gene, herein designated TARGET GENE. LGP2 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LGP2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LGP2 BINDING SITE, designated SEQ ID:8032, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.
- [52432] Another function of GAM7776 is therefore inhibition of LGP2 (Accession NP_077024.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LGP2.
- [52433] Lim homeobox protein 2 (LHX2, Accession NP_004780.3) is another GAM7776 target gene, herein designated TAR-

GET GENE. LHX2 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LHX2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LHX2 BINDING SITE, designated SEQ ID:4178, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52434] Another function of GAM7776 is therefore inhibition of Lim homeobox protein 2 (LHX2, Accession NP_004780.3) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LHX2.

[52435] LIN-28 (Accession NP_078950.1) is another GAM7776 target gene, herein designated TARGET GENE. LIN-28 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LIN-28, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LIN-28 BINDING SITE, designated SEQ ID:4726, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52436] Another function of GAM7776 is therefore inhibition of LIN-28 (Accession NP_078950.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LIN-28.

[52437] Link-GEFII (Accession NP_057423.1) is another GAM7776 target gene, herein designated TARGET GENE. Link-GEFII BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by Link-GEFII, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of Link-GEFII BINDING SITE, designated SEQ ID:19936, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52438] Another function of GAM7776 is therefore inhibition of Link-GEFII (Accession NP_057423.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with Link-GEFII.

[52439] Lipase, member h (LIPH, Accession NP_640341.1) is another GAM7776 target gene, herein designated TARGET GENE. LIPH BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LIPH,

corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LIPH BINDING SITE, designated SEQ ID:10379, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52440] Another function of GAM7776 is therefore inhibition of Lipase, member h (LIPH, Accession NP_640341.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LIPH.

[52441] Lethal giant larvae homolog 2 (drosophila) (LLGL2, Accession NP_004515.1) is another GAM7776 target gene, herein designated TARGET GENE. LLGL2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LLGL2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LLGL2 BINDING SITE, designated SEQ ID:15172, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52442] Another function of GAM7776 is therefore inhibition of

Lethal giant larvae homolog 2 (drosophila) (LLGL2, Accession NP_004515.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LLGL2.

[52443] LNK (Accession NP_005466.1) is another GAM7776 target gene, herein designated TARGET GENE. LNK BINDING SITE1 and LNK BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LNK, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LNK BINDING SITE1 and LNK BINDING SITE2, designated SEQ ID:13992 and SEQ ID:1866 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52444] Another function of GAM7776 is therefore inhibition of LNK (Accession NP_005466.1), a gene which links T- cell receptor activation signal to phospholipase c- gamma- 1, grb- 2 and phosphatidylinositol 3- kinase (by similarity). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LNK.

[52445] The function of LNK and its association with various dis-

eases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM130.1.LOC112687 (Accession XP_053145.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC112687 BINDING SITE1 through LOC112687 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC112687, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC112687 BINDING SITE1 through LOC112687 BINDING SITE3, designated SEQ ID:7988, SEQ ID:16673 and SEQ ID:793 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52446] Another function of GAM7776 is therefore inhibition of LOC112687 (Accession XP_053145.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC112687.

[52447] LOC112817 (Accession NP_612422.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC112817 BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by LOC112817, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC112817 BINDING SITE, designated SEQ ID:16256, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52448] Another function of GAM7776 is therefore inhibition of LOC112817 (Accession NP_612422.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC112817.

[52449] LOC113444 (Accession NP_612437.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC113444 BINDING SITE1 through LOC113444 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC113444, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC113444 BINDING SITE1 through LOC113444 BINDING SITE3, designated SEQ ID:5336, SEQ ID:15899 and SEQ ID:18294 re-

spectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52450] Another function of GAM7776 is therefore inhibition of LOC113444 (Accession NP_612437.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC113444.

[52451] LOC113828 (Accession NP_612444.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC113828 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC113828, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC113828 BINDING SITE, designated SEQ ID:5632, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52452] Another function of GAM7776 is therefore inhibition of LOC113828 (Accession NP_612444.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC113828.

[52453] LOC115123 (Accession XP_055276.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC115123 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC115123, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC115123 BINDING SITE, designated SEQ ID:15271, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52454] Another function of GAM7776 is therefore inhibition of LOC115123 (Accession XP_055276.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC115123.

[52455] LOC115219 (Accession XP_055499.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC115219 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC115219, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC115219 BINDING SITE, designated SEQ ID:12422, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52456] Another function of GAM7776 is therefore inhibition of LOC115219 (Accession XP_055499.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC115219.

[52457] LOC115648 (Accession NP_663299.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC115648 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC115648, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC115648 BINDING SITE, designated SEQ ID:7429, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52458] Another function of GAM7776 is therefore inhibition of LOC115648 (Accession NP_663299.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC115648.

[52459] LOC116411 (Accession XP_058095.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC116411 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC116411, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC116411 BINDING SITE, designated SEQ ID:14720, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52460] Another function of GAM7776 is therefore inhibition of LOC116411 (Accession XP_058095.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC116411.

[52461] LOC118490 (Accession XP_060981.3) is another GAM7776 target gene, herein designated TARGET GENE. LOC118490 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC118490, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC118490 BINDING SITE, designated SEQ ID:456, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52462] Another function of GAM7776 is therefore inhibition of LOC118490 (Accession XP_060981.3) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC118490.

[52463] LOC118812 (Accession XP_058346.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC118812 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by LOC118812, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC118812 BINDING SITE, designated SEQ ID:2649, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52464] Another function of GAM7776 is therefore inhibition of

LOC118812 (Accession XP_058346.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC118812.

[52465] LOC118812 (Accession NP_849154.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC118812 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by LOC118812, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC118812 BINDING SITE, designated SEQ ID:2649, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52466] Another function of GAM7776 is therefore inhibition of LOC118812 (Accession NP_849154.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC118812.

[52467] LOC119395 (Accession XP_061446.3) is another GAM7776 target gene, herein designated TARGET GENE. LOC119395 BINDING SITE is a target binding site found in

the 5' untranslated region of mRNA encoded by LOC119395, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC119395 BINDING SITE, designated SEQ ID:745, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52468] Another function of GAM7776 is therefore inhibition of LOC119395 (Accession XP_061446.3) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC119395.

[52469] LOC120526 (Accession XP_058475.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC120526 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC120526, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC120526 BINDING SITE, designated SEQ ID:17112, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also design-

nated SEQ ID:246.

[52470] Another function of GAM7776 is therefore inhibition of LOC120526 (Accession XP_058475.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC120526.

[52471] LOC121952 (Accession XP_062872.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC121952 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC121952, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC121952 BINDING SITE, designated SEQ ID:9891, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52472] Another function of GAM7776 is therefore inhibition of LOC121952 (Accession XP_062872.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC121952.

[52473] LOC124221 (Accession XP_058785.3) is another

GAM7776 target gene, herein designated TARGET GENE. LOC124221 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC124221, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC124221 BINDING SITE, designated SEQ ID:14576, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52474] Another function of GAM7776 is therefore inhibition of LOC124221 (Accession XP_058785.3) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC124221.

[52475] LOC125061 (Accession XP_058889.3) is another GAM7776 target gene, herein designated TARGET GENE. LOC125061 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC125061, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC125061 BINDING SITE, design-

nated SEQ ID:1744, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52476] Another function of GAM7776 is therefore inhibition of LOC125061 (Accession XP_058889.3) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC125061.

[52477] LOC126669 (Accession XP_060121.4) is another GAM7776 target gene, herein designated TARGET GENE. LOC126669 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC126669, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC126669 BINDING SITE, designated SEQ ID:3477, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52478] Another function of GAM7776 is therefore inhibition of LOC126669 (Accession XP_060121.4) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC126669.

[52479] LOC127253 (Accession XP_059122.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC127253 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC127253, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC127253 BINDING SITE, designated SEQ ID:18918, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52480] Another function of GAM7776 is therefore inhibition of LOC127253 (Accession XP_059122.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC127253.

[52481] LOC127841 (Accession XP_059184.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC127841 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC127841, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC127841 BINDING SITE, designated SEQ ID:18516, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52482] Another function of GAM7776 is therefore inhibition of LOC127841 (Accession XP_059184.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC127841.

[52483] LOC128387 (Accession XP_059243.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC128387 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC128387, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC128387 BINDING SITE, designated SEQ ID:15173, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52484] Another function of GAM7776 is therefore inhibition of LOC128387 (Accession XP_059243.2) . Accordingly, utili-

ties of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC128387.

[52485] LOC132241 (Accession XP_059583.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC132241 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC132241, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC132241 BINDING SITE, designated SEQ ID:509, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52486] Another function of GAM7776 is therefore inhibition of LOC132241 (Accession XP_059583.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC132241.

[52487] LOC135293 (Accession XP_072402.4) is another GAM7776 target gene, herein designated TARGET GENE. LOC135293 BINDING SITE1 and LOC135293 BINDING SITE2 are target binding sites found in untranslated re-

gions of mRNA encoded by LOC135293, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC135293 BINDING SITE1 and LOC135293 BINDING SITE2, designated SEQ ID:3512 and SEQ ID:10443 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52488] Another function of GAM7776 is therefore inhibition of LOC135293 (Accession XP_072402.4) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC135293.

[52489] LOC135763 (Accession NP_612639.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC135763 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC135763, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC135763 BINDING SITE, designated SEQ ID:17207, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also design-

nated SEQ ID:246.

[52490] Another function of GAM7776 is therefore inhibition of LOC135763 (Accession NP_612639.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC135763.

[52491] LOC135818 (Accession XP_059804.4) is another GAM7776 target gene, herein designated TARGET GENE. LOC135818 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC135818, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC135818 BINDING SITE, designated SEQ ID:19136, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52492] Another function of GAM7776 is therefore inhibition of LOC135818 (Accession XP_059804.4) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC135818.

[52493] LOC137886 (Accession XP_059929.3) is another

GAM7776 target gene, herein designated TARGET GENE. LOC137886 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC137886, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC137886 BINDING SITE, designated SEQ ID:19990, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52494] Another function of GAM7776 is therefore inhibition of LOC137886 (Accession XP_059929.3) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC137886.

[52495] LOC139422 (Accession XP_066687.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC139422 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC139422, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC139422 BINDING SITE, design-

nated SEQ ID:9489, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52496] Another function of GAM7776 is therefore inhibition of LOC139422 (Accession XP_066687.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC139422.

[52497] LOC143241 (Accession NP_620167.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC143241 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC143241, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC143241 BINDING SITE, designated SEQ ID:15574, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52498] Another function of GAM7776 is therefore inhibition of LOC143241 (Accession NP_620167.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC143241.

[52499] LOC144248 (Accession XP_084786.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC144248 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC144248, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC144248 BINDING SITE, designated SEQ ID:3159, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52500] Another function of GAM7776 is therefore inhibition of LOC144248 (Accession XP_084786.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC144248.

[52501] LOC144266 (Accession XP_084795.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC144266 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC144266, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC144266 BINDING SITE, designated SEQ ID:17498, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52502] Another function of GAM7776 is therefore inhibition of LOC144266 (Accession XP_084795.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC144266.

[52503] LOC144404 (Accession XP_084852.6) is another GAM7776 target gene, herein designated TARGET GENE. LOC144404 BINDING SITE1 through LOC144404 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC144404, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC144404 BINDING SITE1 through LOC144404 BINDING SITE3, designated SEQ ID:1633, SEQ ID:15352 and SEQ ID:5897 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52504] Another function of GAM7776 is therefore inhibition of

LOC144404 (Accession XP_084852.6) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC144404.

[52505] LOC144467 (Accession NP_612482.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC144467 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC144467, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC144467 BINDING SITE, designated SEQ ID:5733, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52506] Another function of GAM7776 is therefore inhibition of LOC144467 (Accession NP_612482.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC144467.

[52507] LOC144481 (Accession XP_096611.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC144481 BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by LOC144481, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC144481 BINDING SITE, designated SEQ ID:19220, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52508] Another function of GAM7776 is therefore inhibition of LOC144481 (Accession XP_096611.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC144481.

[52509] LOC144667 (Accession XP_096648.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC144667 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC144667, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC144667 BINDING SITE, designated SEQ ID:12712, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also design-

nated SEQ ID:246.

[52510] Another function of GAM7776 is therefore inhibition of LOC144667 (Accession XP_096648.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC144667.

[52511] LOC144742 (Accession XP_084949.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC144742 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC144742, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC144742 BINDING SITE, designated SEQ ID:17736, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52512] Another function of GAM7776 is therefore inhibition of LOC144742 (Accession XP_084949.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC144742.

[52513] LOC144766 (Accession XP_084963.2) is another

GAM7776 target gene, herein designated TARGET GENE. LOC144766 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC144766, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC144766 BINDING SITE, designated SEQ ID:8972, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52514] Another function of GAM7776 is therefore inhibition of LOC144766 (Accession XP_084963.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC144766.

[52515] LOC144776 (Accession XP_084964.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC144776 BINDING SITE1 and LOC144776 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC144776, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC144776

BINDING SITE1 and LOC144776 BINDING SITE2, designated SEQ ID:444 and SEQ ID:16275 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52516] Another function of GAM7776 is therefore inhibition of LOC144776 (Accession XP_084964.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC144776.

[52517] LOC144817 (Accession XP_084972.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC144817 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC144817, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC144817 BINDING SITE, designated SEQ ID:12065, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52518] Another function of GAM7776 is therefore inhibition of LOC144817 (Accession XP_084972.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC144817.

[52519] LOC144962 (Accession XP_084990.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC144962 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC144962, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC144962 BINDING SITE, designated SEQ ID:12130, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52520] Another function of GAM7776 is therefore inhibition of LOC144962 (Accession XP_084990.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC144962.

[52521] LOC145098 (Accession XP_085022.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC145098 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC145098, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC145098 BINDING SITE, designated SEQ ID:675, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52522] Another function of GAM7776 is therefore inhibition of LOC145098 (Accession XP_085022.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC145098.

[52523] LOC145231 (Accession XP_096740.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC145231 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC145231, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC145231 BINDING SITE, designated SEQ ID:6417, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52524] Another function of GAM7776 is therefore inhibition of

LOC145231 (Accession XP_096740.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC145231.

[52525] LOC145268 (Accession XP_085072.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC145268 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC145268, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC145268 BINDING SITE, designated SEQ ID:18805, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52526] Another function of GAM7776 is therefore inhibition of LOC145268 (Accession XP_085072.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC145268.

[52527] LOC145725 (Accession XP_085211.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC145725 BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by LOC145725, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC145725 BINDING SITE, designated SEQ ID:4773, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52528] Another function of GAM7776 is therefore inhibition of LOC145725 (Accession XP_085211.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC145725.

[52529] LOC145757 (Accession XP_085227.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC145757 BINDING SITE1 and LOC145757 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC145757, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC145757 BINDING SITE1 and LOC145757 BINDING SITE2, designated SEQ ID:7370 and SEQ ID:11523 respectively, to the

nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52530] Another function of GAM7776 is therefore inhibition of LOC145757 (Accession XP_085227.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC145757.

[52531] LOC145783 (Accession XP_085231.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC145783 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC145783, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC145783 BINDING SITE, designated SEQ ID:2196, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52532] Another function of GAM7776 is therefore inhibition of LOC145783 (Accession XP_085231.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC145783.

[52533] LOC145813 (Accession XP_096873.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC145813 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC145813, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC145813 BINDING SITE, designated SEQ ID:16256, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52534] Another function of GAM7776 is therefore inhibition of LOC145813 (Accession XP_096873.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC145813.

[52535] LOC145988 (Accession XP_085290.3) is another GAM7776 target gene, herein designated TARGET GENE. LOC145988 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC145988, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC145988 BINDING SITE, designated SEQ ID:11009, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52536] Another function of GAM7776 is therefore inhibition of LOC145988 (Accession XP_085290.3) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC145988.

[52537] LOC146177 (Accession NP_778229.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC146177 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC146177, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC146177 BINDING SITE, designated SEQ ID:16175, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52538] Another function of GAM7776 is therefore inhibition of LOC146177 (Accession NP_778229.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC146177.

[52539] LOC146229 (Accession XP_085387.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC146229 BINDING SITE1 through LOC146229 BINDING SITE4 are target binding sites found in untranslated regions of mRNA encoded by LOC146229, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC146229 BINDING SITE1 through LOC146229 BINDING SITE4, designated SEQ ID:5672, SEQ ID:8706, SEQ ID:5551 and SEQ ID:1644 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52540] Another function of GAM7776 is therefore inhibition of LOC146229 (Accession XP_085387.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC146229.

[52541] LOC146346 (Accession XP_085430.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC146346 BINDING SITE1 and LOC146346 BINDING

SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC146346, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC146346 BINDING SITE1 and LOC146346 BINDING SITE2, designated SEQ ID:5798 and SEQ ID:17670 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52542] Another function of GAM7776 is therefore inhibition of LOC146346 (Accession XP_085430.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC146346.

[52543] LOC146429 (Accession XP_096998.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC146429 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC146429, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC146429 BINDING SITE, designated SEQ ID:2457, to the nucleotide sequence of

GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52544] Another function of GAM7776 is therefore inhibition of LOC146429 (Accession XP_096998.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC146429.

[52545] LOC146443 (Accession XP_085461.6) is another GAM7776 target gene, herein designated TARGET GENE. LOC146443 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC146443, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC146443 BINDING SITE, designated SEQ ID:813, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52546] Another function of GAM7776 is therefore inhibition of LOC146443 (Accession XP_085461.6) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC146443.

[52547] LOC146475 (Accession XP_097006.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC146475 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC146475, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC146475 BINDING SITE, designated SEQ ID:9246, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52548] Another function of GAM7776 is therefore inhibition of LOC146475 (Accession XP_097006.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC146475.

[52549] LOC146513 (Accession XP_097013.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC146513 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC146513, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC146513 BINDING SITE, designated SEQ ID:3374, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52550] Another function of GAM7776 is therefore inhibition of LOC146513 (Accession XP_097013.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC146513.

[52551] LOC146603 (Accession XP_085514.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC146603 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC146603, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC146603 BINDING SITE, designated SEQ ID:7382, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52552] Another function of GAM7776 is therefore inhibition of LOC146603 (Accession XP_085514.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC146603.

[52553] LOC146784 (Accession XP_085588.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC146784 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC146784, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC146784 BINDING SITE, designated SEQ ID:13448, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52554] Another function of GAM7776 is therefore inhibition of LOC146784 (Accession XP_085588.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC146784.

[52555] LOC146839 (Accession XP_097107.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC146839 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC146839, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC146839 BINDING SITE, designated SEQ ID:1745, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52556] Another function of GAM7776 is therefore inhibition of LOC146839 (Accession XP_097107.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC146839.

[52557] LOC146894 (Accession NP_660316.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC146894 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC146894, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC146894 BINDING SITE, designated SEQ ID:8315, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52558] Another function of GAM7776 is therefore inhibition of

LOC146894 (Accession NP_660316.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC146894.

[52559] LOC146895 (Accession XP_097120.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC146895 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC146895, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC146895 BINDING SITE, designated SEQ ID:8232, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52560] Another function of GAM7776 is therefore inhibition of LOC146895 (Accession XP_097120.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC146895.

[52561] LOC146901 (Accession XP_097121.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC146901 BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by LOC146901, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC146901 BINDING SITE, designated SEQ ID:6392, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52562] Another function of GAM7776 is therefore inhibition of LOC146901 (Accession XP_097121.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC146901.

[52563] LOC146909 (Accession XP_085634.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC146909 BINDING SITE1 and LOC146909 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC146909, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC146909 BINDING SITE1 and LOC146909 BINDING SITE2, designated SEQ ID:9492 and SEQ ID:19550 respectively, to the

nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52564] Another function of GAM7776 is therefore inhibition of LOC146909 (Accession XP_085634.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC146909.

[52565] LOC147071 (Accession XP_054031.5) is another GAM7776 target gene, herein designated TARGET GENE. LOC147071 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC147071, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC147071 BINDING SITE, designated SEQ ID:16699, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52566] Another function of GAM7776 is therefore inhibition of LOC147071 (Accession XP_054031.5) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC147071.

[52567] LOC147080 (Accession XP_097182.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC147080 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC147080, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC147080 BINDING SITE, designated SEQ ID:12558, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52568] Another function of GAM7776 is therefore inhibition of LOC147080 (Accession XP_097182.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC147080.

[52569] LOC147166 (Accession XP_085722.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC147166 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC147166, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC147166 BINDING SITE, designated SEQ ID:10618, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52570] Another function of GAM7776 is therefore inhibition of LOC147166 (Accession XP_085722.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC147166.

[52571] LOC147381 (Accession XP_097230.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC147381 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC147381, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC147381 BINDING SITE, designated SEQ ID:19915, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52572] Another function of GAM7776 is therefore inhibition of LOC147381 (Accession XP_097230.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC147381.

[52573] LOC147407 (Accession XP_084000.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC147407 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC147407, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC147407 BINDING SITE, designated SEQ ID:12065, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52574] Another function of GAM7776 is therefore inhibition of LOC147407 (Accession XP_084000.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC147407.

[52575] LOC147817 (Accession XP_085903.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC147817 BINDING SITE1 and LOC147817 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC147817, corresponding to

target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC147817 BINDING SITE1 and LOC147817 BINDING SITE2, designated SEQ ID:19233 and SEQ ID:1634 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52576] Another function of GAM7776 is therefore inhibition of LOC147817 (Accession XP_085903.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC147817.

[52577] LOC147841 (Accession XP_085924.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC147841 BINDING SITE1 and LOC147841 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC147841, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC147841 BINDING SITE1 and LOC147841 BINDING SITE2, designated SEQ ID:12065 and SEQ ID:8642 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated

GAM RNA, also designated SEQ ID:246.

[52578] Another function of GAM7776 is therefore inhibition of LOC147841 (Accession XP_085924.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC147841.

[52579] LOC147947 (Accession XP_085974.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC147947 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC147947, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC147947 BINDING SITE, designated SEQ ID:17952, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52580] Another function of GAM7776 is therefore inhibition of LOC147947 (Accession XP_085974.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC147947.

[52581] LOC148137 (Accession NP_653293.1) is another

GAM7776 target gene, herein designated TARGET GENE. LOC148137 BINDING SITE1 and LOC148137 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC148137, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC148137 BINDING SITE1 and LOC148137 BINDING SITE2, designated SEQ ID:17935 and SEQ ID:5784 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52582] Another function of GAM7776 is therefore inhibition of LOC148137 (Accession NP_653293.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC148137.

[52583] LOC148198 (Accession XP_047554.4) is another GAM7776 target gene, herein designated TARGET GENE. LOC148198 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC148198, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC148198 BINDING SITE, designated SEQ ID:11563, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52584] Another function of GAM7776 is therefore inhibition of LOC148198 (Accession XP_047554.4) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC148198.

[52585] LOC148708 (Accession XP_086286.4) is another GAM7776 target gene, herein designated TARGET GENE. LOC148708 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC148708, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC148708 BINDING SITE, designated SEQ ID:15671, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52586] Another function of GAM7776 is therefore inhibition of LOC148708 (Accession XP_086286.4) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC148708.

[52587] LOC148709 (Accession XP_086281.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC148709 BINDING SITE1 and LOC148709 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC148709, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC148709 BINDING SITE1 and LOC148709 BINDING SITE2, designated SEQ ID:9201 and SEQ ID:6922 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52588] Another function of GAM7776 is therefore inhibition of LOC148709 (Accession XP_086281.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC148709.

[52589] LOC149149 (Accession XP_097598.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC149149 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by

LOC149149, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC149149 BINDING SITE, designated SEQ ID:2184, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52590] Another function of GAM7776 is therefore inhibition of LOC149149 (Accession XP_097598.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC149149.

[52591] LOC149194 (Accession XP_086458.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC149194 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC149194, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC149194 BINDING SITE, designated SEQ ID:12637, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52592] Another function of GAM7776 is therefore inhibition of LOC149194 (Accession XP_086458.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC149194.

[52593] LOC149371 (Accession NP_787072.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC149371 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC149371, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC149371 BINDING SITE, designated SEQ ID:13354, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52594] Another function of GAM7776 is therefore inhibition of LOC149371 (Accession NP_787072.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC149371.

[52595] LOC149466 (Accession XP_086546.1) is another GAM7776 target gene, herein designated TARGET GENE.

LOC149466 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC149466, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC149466 BINDING SITE, designated SEQ ID:16260, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52596] Another function of GAM7776 is therefore inhibition of LOC149466 (Accession XP_086546.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC149466.

[52597] LOC149478 (Accession XP_086536.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC149478 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC149478, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC149478 BINDING SITE, designated SEQ ID:5016, to the nucleotide sequence of

GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52598] Another function of GAM7776 is therefore inhibition of LOC149478 (Accession XP_086536.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC149478.

[52599] LOC149506 (Accession XP_097661.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC149506 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC149506, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC149506 BINDING SITE, designated SEQ ID:2139, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52600] Another function of GAM7776 is therefore inhibition of LOC149506 (Accession XP_097661.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC149506.

[52601] LOC149606 (Accession XP_086600.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC149606 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC149606, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC149606 BINDING SITE, designated SEQ ID:8887, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52602] Another function of GAM7776 is therefore inhibition of LOC149606 (Accession XP_086600.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC149606.

[52603] LOC149692 (Accession XP_097706.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC149692 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC149692, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC149692 BINDING SITE, designated SEQ ID:11025, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52604] Another function of GAM7776 is therefore inhibition of LOC149692 (Accession XP_097706.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC149692.

[52605] LOC149703 (Accession XP_097719.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC149703 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC149703, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC149703 BINDING SITE, designated SEQ ID:10508, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52606] Another function of GAM7776 is therefore inhibition of LOC149703 (Accession XP_097719.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC149703.

[52607] LOC149832 (Accession XP_097733.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC149832 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC149832, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC149832 BINDING SITE, designated SEQ ID:17917, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52608] Another function of GAM7776 is therefore inhibition of LOC149832 (Accession XP_097733.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC149832.

[52609] LOC150054 (Accession XP_097797.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC150054 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC150054, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC150054 BINDING SITE, designated SEQ ID:5157, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52610] Another function of GAM7776 is therefore inhibition of LOC150054 (Accession XP_097797.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC150054.

[52611] LOC150225 (Accession XP_097870.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC150225 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC150225, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC150225 BINDING SITE, designated SEQ ID:7207, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52612] Another function of GAM7776 is therefore inhibition of

LOC150225 (Accession XP_097870.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC150225.

[52613] LOC150384 (Accession XP_097894.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC150384 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC150384, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC150384 BINDING SITE, designated SEQ ID:7485, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52614] Another function of GAM7776 is therefore inhibition of LOC150384 (Accession XP_097894.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC150384.

[52615] LOC150397 (Accession XP_086907.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC150397 BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by LOC150397, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC150397 BINDING SITE, designated SEQ ID:19467, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52616] Another function of GAM7776 is therefore inhibition of LOC150397 (Accession XP_086907.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC150397.

[52617] LOC150587 (Accession XP_097917.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC150587 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC150587, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC150587 BINDING SITE, designated SEQ ID:16940, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also design-

nated SEQ ID:246.

[52618] Another function of GAM7776 is therefore inhibition of LOC150587 (Accession XP_097917.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC150587.

[52619] LOC151057 (Accession XP_097998.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC151057 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC151057, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC151057 BINDING SITE, designated SEQ ID:12075, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52620] Another function of GAM7776 is therefore inhibition of LOC151057 (Accession XP_097998.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC151057.

[52621] LOC151196 (Accession XP_098019.1) is another

GAM7776 target gene, herein designated TARGET GENE. LOC151196 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC151196, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC151196 BINDING SITE, designated SEQ ID:19774, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52622] Another function of GAM7776 is therefore inhibition of LOC151196 (Accession XP_098019.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC151196.

[52623] LOC151201 (Accession XP_098021.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC151201 BINDING SITE1 and LOC151201 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC151201, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC151201

BINDING SITE1 and LOC151201 BINDING SITE2, designated SEQ ID:12725 and SEQ ID:2572 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52624] Another function of GAM7776 is therefore inhibition of LOC151201 (Accession XP_098021.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC151201.

[52625] LOC151475 (Accession XP_098063.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC151475 BINDING SITE1 and LOC151475 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC151475, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC151475 BINDING SITE1 and LOC151475 BINDING SITE2, designated SEQ ID:4174 and SEQ ID:4371 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52626] Another function of GAM7776 is therefore inhibition of LOC151475 (Accession XP_098063.1) . Accordingly, utili-

ties of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC151475.

[52627] LOC151610 (Accession XP_087245.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC151610 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC151610, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC151610 BINDING SITE, designated SEQ ID:2599, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52628] Another function of GAM7776 is therefore inhibition of LOC151610 (Accession XP_087245.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC151610.

[52629] LOC151636 (Accession NP_612144.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC151636 BINDING SITE1 through LOC151636 BINDING SITE3 are target binding sites found in untranslated re-

gions of mRNA encoded by LOC151636, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC151636 BINDING SITE1 through LOC151636 BINDING SITE3, designated SEQ ID:2693, SEQ ID:4151 and SEQ ID:14731 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52630] Another function of GAM7776 is therefore inhibition of LOC151636 (Accession NP_612144.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC151636.

[52631] LOC151657 (Accession XP_098100.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC151657 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC151657, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC151657 BINDING SITE, designated SEQ ID:4248, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also design-

nated SEQ ID:246.

[52632] Another function of GAM7776 is therefore inhibition of LOC151657 (Accession XP_098100.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC151657.

[52633] LOC151877 (Accession XP_098132.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC151877 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC151877, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC151877 BINDING SITE, designated SEQ ID:4677, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52634] Another function of GAM7776 is therefore inhibition of LOC151877 (Accession XP_098132.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC151877.

[52635] LOC152245 (Accession XP_098182.1) is another

GAM7776 target gene, herein designated TARGET GENE. LOC152245 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC152245, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC152245 BINDING SITE, designated SEQ ID:9470, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52636] Another function of GAM7776 is therefore inhibition of LOC152245 (Accession XP_098182.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC152245.

[52637] LOC152445 (Accession XP_098231.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC152445 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC152445, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC152445 BINDING SITE, design-

nated SEQ ID:2922, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52638] Another function of GAM7776 is therefore inhibition of LOC152445 (Accession XP_098231.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC152445.

[52639] LOC152620 (Accession XP_011108.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC152620 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC152620, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC152620 BINDING SITE, designated SEQ ID:1745, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52640] Another function of GAM7776 is therefore inhibition of LOC152620 (Accession XP_011108.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC152620.

[52641] LOC152719 (Accession XP_098257.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC152719 BINDING SITE1 and LOC152719 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC152719, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC152719 BINDING SITE1 and LOC152719 BINDING SITE2, designated SEQ ID:11919 and SEQ ID:17637 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52642] Another function of GAM7776 is therefore inhibition of LOC152719 (Accession XP_098257.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC152719.

[52643] LOC152794 (Accession XP_087525.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC152794 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC152794, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC152794 BINDING SITE, designated SEQ ID:2010, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52644] Another function of GAM7776 is therefore inhibition of LOC152794 (Accession XP_087525.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC152794.

[52645] LOC152804 (Accession XP_098266.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC152804 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC152804, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC152804 BINDING SITE, designated SEQ ID:9568, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52646] Another function of GAM7776 is therefore inhibition of

LOC152804 (Accession XP_098266.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC152804.

[52647] LOC153077 (Accession XP_098307.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC153077 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC153077, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC153077 BINDING SITE, designated SEQ ID:5304, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52648] Another function of GAM7776 is therefore inhibition of LOC153077 (Accession XP_098307.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC153077.

[52649] LOC153811 (Accession XP_087779.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC153811 BINDING SITE1 through LOC153811 BINDING

SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC153811, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC153811 BINDING SITE1 through LOC153811 BINDING SITE3, designated SEQ ID:9683, SEQ ID:17512 and SEQ ID:19665 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52650] Another function of GAM7776 is therefore inhibition of LOC153811 (Accession XP_087779.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC153811.

[52651] LOC153883 (Accession XP_087798.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC153883 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC153883, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC153883 BINDING SITE, designated SEQ ID:15929, to the nucleotide sequence of

GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52652] Another function of GAM7776 is therefore inhibition of LOC153883 (Accession XP_087798.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC153883.

[52653] LOC153910 (Accession XP_087801.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC153910 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC153910, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC153910 BINDING SITE, designated SEQ ID:2882, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52654] Another function of GAM7776 is therefore inhibition of LOC153910 (Accession XP_087801.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC153910.

[52655] LOC154282 (Accession XP_098505.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC154282 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC154282, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC154282 BINDING SITE, designated SEQ ID:4307, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52656] Another function of GAM7776 is therefore inhibition of LOC154282 (Accession XP_098505.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC154282.

[52657] LOC154822 (Accession XP_098618.3) is another GAM7776 target gene, herein designated TARGET GENE. LOC154822 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC154822, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC154822 BINDING SITE, designated SEQ ID:19205, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52658] Another function of GAM7776 is therefore inhibition of LOC154822 (Accession XP_098618.3) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC154822.

[52659] LOC154877 (Accession XP_098626.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC154877 BINDING SITE1 through LOC154877 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC154877, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC154877 BINDING SITE1 through LOC154877 BINDING SITE3, designated SEQ ID:17731, SEQ ID:3200 and SEQ ID:16089 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52660] Another function of GAM7776 is therefore inhibition of LOC154877 (Accession XP_098626.1) . Accordingly, utili-

ties of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC154877.

[52661] LOC155066 (Accession XP_088142.4) is another GAM7776 target gene, herein designated TARGET GENE. LOC155066 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC155066, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC155066 BINDING SITE, designated SEQ ID:17980, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52662] Another function of GAM7776 is therefore inhibition of LOC155066 (Accession XP_088142.4) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC155066.

[52663] LOC158014 (Accession XP_088442.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC158014 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by

LOC158014, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC158014 BINDING SITE, designated SEQ ID:2542, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52664] Another function of GAM7776 is therefore inhibition of LOC158014 (Accession XP_088442.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC158014.

[52665] LOC158228 (Accession XP_098903.4) is another GAM7776 target gene, herein designated TARGET GENE. LOC158228 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC158228, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC158228 BINDING SITE, designated SEQ ID:5779, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52666] Another function of GAM7776 is therefore inhibition of LOC158228 (Accession XP_098903.4) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC158228.

[52667] LOC158310 (Accession XP_098919.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC158310 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC158310, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC158310 BINDING SITE, designated SEQ ID:14859, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52668] Another function of GAM7776 is therefore inhibition of LOC158310 (Accession XP_098919.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC158310.

[52669] LOC158381 (Accession XP_048461.1) is another GAM7776 target gene, herein designated TARGET GENE.

LOC158381 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC158381, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC158381 BINDING SITE, designated SEQ ID:6212, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52670] Another function of GAM7776 is therefore inhibition of LOC158381 (Accession XP_048461.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC158381.

[52671] LOC158402 (Accession XP_098936.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC158402 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC158402, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC158402 BINDING SITE, designated SEQ ID:17964, to the nucleotide sequence of

GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52672] Another function of GAM7776 is therefore inhibition of LOC158402 (Accession XP_098936.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC158402.

[52673] LOC158436 (Accession XP_098942.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC158436 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC158436, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC158436 BINDING SITE, designated SEQ ID:1263, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52674] Another function of GAM7776 is therefore inhibition of LOC158436 (Accession XP_098942.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC158436.

[52675] LOC158476 (Accession XP_098955.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC158476 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC158476, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC158476 BINDING SITE, designated SEQ ID:935, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52676] Another function of GAM7776 is therefore inhibition of LOC158476 (Accession XP_098955.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC158476.

[52677] LOC158572 (Accession XP_088608.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC158572 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC158572, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC158572 BINDING SITE, designated SEQ ID:12003, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52678] Another function of GAM7776 is therefore inhibition of LOC158572 (Accession XP_088608.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC158572.

[52679] LOC158668 (Accession XP_045161.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC158668 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC158668, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC158668 BINDING SITE, designated SEQ ID:16260, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52680] Another function of GAM7776 is therefore inhibition of LOC158668 (Accession XP_045161.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC158668.

[52681] LOC160897 (Accession XP_090573.3) is another GAM7776 target gene, herein designated TARGET GENE. LOC160897 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC160897, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC160897 BINDING SITE, designated SEQ ID:17208, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52682] Another function of GAM7776 is therefore inhibition of LOC160897 (Accession XP_090573.3) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC160897.

[52683] LOC162427 (Accession NP_835227.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC162427 BINDING SITE1 and LOC162427 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by

LOC162427, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC162427 BINDING SITE1 and LOC162427 BINDING SITE2, designated SEQ ID:8231 and SEQ ID:8231 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52684] Another function of GAM7776 is therefore inhibition of LOC162427 (Accession NP_835227.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC162427.

[52685] LOC162427 (Accession NP_835227.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC162427 BINDING SITE1 and LOC162427 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by LOC162427, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC162427 BINDING SITE1 and LOC162427 BINDING SITE2, designated SEQ ID:12068 and

SEQ ID:12068 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52686] Another function of GAM7776 is therefore inhibition of LOC162427 (Accession NP_835227.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC162427.

[52687] LOC162962 (Accession XP_091886.7) is another GAM7776 target gene, herein designated TARGET GENE. LOC162962 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC162962, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC162962 BINDING SITE, designated SEQ ID:3249, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52688] Another function of GAM7776 is therefore inhibition of LOC162962 (Accession XP_091886.7) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC162962.

[52689] LOC162967 (Accession XP_091890.6) is another GAM7776 target gene, herein designated TARGET GENE. LOC162967 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC162967, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC162967 BINDING SITE, designated SEQ ID:13831, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52690] Another function of GAM7776 is therefore inhibition of LOC162967 (Accession XP_091890.6) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC162967.

[52691] LOC163227 (Accession NP_775802.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC163227 BINDING SITE1 and LOC163227 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC163227, corresponding to target binding sites such as BINDING SITE I, BINDING SITE

II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC163227 BINDING SITE1 and LOC163227 BINDING SITE2, designated SEQ ID:9147 and SEQ ID:11854 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52692] Another function of GAM7776 is therefore inhibition of LOC163227 (Accession NP_775802.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC163227.

[52693] LOC164091 (Accession XP_089356.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC164091 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC164091, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC164091 BINDING SITE, designated SEQ ID:7989, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52694] Another function of GAM7776 is therefore inhibition of

LOC164091 (Accession XP_089356.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC164091.

[52695] LOC168451 (Accession XP_095114.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC168451 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC168451, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC168451 BINDING SITE, designated SEQ ID:19786, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52696] Another function of GAM7776 is therefore inhibition of LOC168451 (Accession XP_095114.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC168451.

[52697] LOC170409 (Accession XP_096330.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC170409 BINDING SITE is a target binding site found in

the 5' untranslated region of mRNA encoded by LOC170409, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC170409 BINDING SITE, designated SEQ ID:15561, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52698] Another function of GAM7776 is therefore inhibition of LOC170409 (Accession XP_096330.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC170409.

[52699] LOC196264 (Accession XP_113683.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC196264 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC196264, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC196264 BINDING SITE, designated SEQ ID:2452, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also design-

nated SEQ ID:246.

[52700] Another function of GAM7776 is therefore inhibition of LOC196264 (Accession XP_113683.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC196264.

[52701] LOC197342 (Accession XP_113869.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC197342 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC197342, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC197342 BINDING SITE, designated SEQ ID:2432, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52702] Another function of GAM7776 is therefore inhibition of LOC197342 (Accession XP_113869.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC197342.

[52703] LOC197358 (Accession XP_113872.2) is another

GAM7776 target gene, herein designated TARGET GENE. LOC197358 BINDING SITE1 and LOC197358 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC197358, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC197358 BINDING SITE1 and LOC197358 BINDING SITE2, designated SEQ ID:4625 and SEQ ID:6387 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52704] Another function of GAM7776 is therefore inhibition of LOC197358 (Accession XP_113872.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC197358.

[52705] LOC199725 (Accession XP_117119.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC199725 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC199725, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC199725 BINDING SITE, designated SEQ ID:10884, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52706] Another function of GAM7776 is therefore inhibition of LOC199725 (Accession XP_117119.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC199725.

[52707] LOC199899 (Accession XP_117153.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC199899 BINDING SITE1 and LOC199899 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC199899, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC199899 BINDING SITE1 and LOC199899 BINDING SITE2, designated SEQ ID:8292 and SEQ ID:5253 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52708] Another function of GAM7776 is therefore inhibition of LOC199899 (Accession XP_117153.1) . Accordingly, utili-

ties of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC199899.

[52709] LOC199906 (Accession XP_114052.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC199906 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC199906, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC199906 BINDING SITE, designated SEQ ID:19756, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52710] Another function of GAM7776 is therefore inhibition of LOC199906 (Accession XP_114052.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC199906.

[52711] LOC200169 (Accession XP_211599.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC200169 BINDING SITE1 and LOC200169 BINDING SITE2 are target binding sites found in untranslated re-

gions of multiple transcripts of mRNA encoded by LOC200169, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC200169 BINDING SITE1 and LOC200169 BINDING SITE2, designated SEQ ID:5066 and SEQ ID:6122 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52712] Another function of GAM7776 is therefore inhibition of LOC200169 (Accession XP_211599.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC200169.

[52713] LOC200844 (Accession XP_114306.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC200844 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC200844, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC200844 BINDING SITE, designated SEQ ID:16540, to the nucleotide sequence of

GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52714] Another function of GAM7776 is therefore inhibition of LOC200844 (Accession XP_114306.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC200844.

[52715] LOC200860 (Accession XP_117289.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC200860 BINDING SITE1 and LOC200860 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC200860, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC200860 BINDING SITE1 and LOC200860 BINDING SITE2, designated SEQ ID:4175 and SEQ ID:12075 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52716] Another function of GAM7776 is therefore inhibition of LOC200860 (Accession XP_117289.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC200860.

[52717] LOC200895 (Accession NP_789785.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC200895 BINDING SITE1 and LOC200895 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC200895, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC200895 BINDING SITE1 and LOC200895 BINDING SITE2, designated SEQ ID:11863 and SEQ ID:17681 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52718] Another function of GAM7776 is therefore inhibition of LOC200895 (Accession NP_789785.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC200895.

[52719] LOC200916 (Accession XP_114317.3) is another GAM7776 target gene, herein designated TARGET GENE. LOC200916 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC200916, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC200916 BINDING SITE, designated SEQ ID:3465, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52720] Another function of GAM7776 is therefore inhibition of LOC200916 (Accession XP_114317.3) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC200916.

[52721] LOC201164 (Accession XP_290750.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC201164 BINDING SITE1 and LOC201164 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by LOC201164, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC201164 BINDING SITE1 and LOC201164 BINDING SITE2, designated SEQ ID:13384 and SEQ ID:16993 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also design-

nated SEQ ID:246.

[52722] Another function of GAM7776 is therefore inhibition of LOC201164 (Accession XP_290750.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC201164.

[52723] LOC201292 (Accession NP_775818.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC201292 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC201292, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC201292 BINDING SITE, designated SEQ ID:4556, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52724] Another function of GAM7776 is therefore inhibition of LOC201292 (Accession NP_775818.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC201292.

[52725] LOC201562 (Accession XP_114343.2) is another

GAM7776 target gene, herein designated TARGET GENE. LOC201562 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC201562, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC201562 BINDING SITE, designated SEQ ID:15044, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52726] Another function of GAM7776 is therefore inhibition of LOC201562 (Accession XP_114343.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC201562.

[52727] LOC201725 (Accession XP_114370.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC201725 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC201725, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC201725 BINDING SITE, design-

nated SEQ ID:5492, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52728] Another function of GAM7776 is therefore inhibition of LOC201725 (Accession XP_114370.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC201725.

[52729] LOC202400 (Accession XP_117397.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC202400 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC202400, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC202400 BINDING SITE, designated SEQ ID:9145, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52730] Another function of GAM7776 is therefore inhibition of LOC202400 (Accession XP_117397.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC202400.

[52731] LOC202404 (Accession XP_114481.4) is another GAM7776 target gene, herein designated TARGET GENE. LOC202404 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC202404, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC202404 BINDING SITE, designated SEQ ID:18628, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52732] Another function of GAM7776 is therefore inhibition of LOC202404 (Accession XP_114481.4) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC202404.

[52733] LOC202460 (Accession XP_114493.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC202460 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC202460, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC202460 BINDING SITE, designated SEQ ID:16450, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52734] Another function of GAM7776 is therefore inhibition of LOC202460 (Accession XP_114493.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC202460.

[52735] LOC202934 (Accession XP_117486.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC202934 BINDING SITE1 and LOC202934 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC202934, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC202934 BINDING SITE1 and LOC202934 BINDING SITE2, designated SEQ ID:1729 and SEQ ID:4820 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52736] Another function of GAM7776 is therefore inhibition of

LOC202934 (Accession XP_117486.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC202934.

[52737] LOC203547 (Accession XP_114719.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC203547 BINDING SITE1 and LOC203547 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC203547, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC203547 BINDING SITE1 and LOC203547 BINDING SITE2, designated SEQ ID:9545 and SEQ ID:2351 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52738] Another function of GAM7776 is therefore inhibition of LOC203547 (Accession XP_114719.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC203547.

[52739] LOC204288 (Accession XP_115295.1) is another GAM7776 target gene, herein designated TARGET GENE.

LOC204288 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC204288, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC204288 BINDING SITE, designated SEQ ID:10724, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52740] Another function of GAM7776 is therefore inhibition of LOC204288 (Accession XP_115295.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC204288.

[52741] LOC219293 (Accession XP_166599.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC219293 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC219293, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC219293 BINDING SITE, designated SEQ ID:19361, to the nucleotide sequence of

GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52742] Another function of GAM7776 is therefore inhibition of LOC219293 (Accession XP_166599.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC219293.

[52743] LOC219700 (Accession XP_167570.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC219700 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC219700, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC219700 BINDING SITE, designated SEQ ID:2410, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52744] Another function of GAM7776 is therefore inhibition of LOC219700 (Accession XP_167570.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC219700.

[52745] LOC219731 (Accession XP_167596.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC219731 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC219731, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC219731 BINDING SITE, designated SEQ ID:4678, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52746] Another function of GAM7776 is therefore inhibition of LOC219731 (Accession XP_167596.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC219731.

[52747] LOC219735 (Accession XP_167601.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC219735 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC219735, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC219735 BINDING SITE, designated SEQ ID:18913, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52748] Another function of GAM7776 is therefore inhibition of LOC219735 (Accession XP_167601.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC219735.

[52749] LOC219894 (Accession XP_167782.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC219894 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC219894, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC219894 BINDING SITE, designated SEQ ID:14588, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52750] Another function of GAM7776 is therefore inhibition of LOC219894 (Accession XP_167782.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC219894.

[52751] LOC220074 (Accession NP_660352.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC220074 BINDING SITE1 through LOC220074 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC220074, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC220074 BINDING SITE1 through LOC220074 BINDING SITE3, designated SEQ ID:16838, SEQ ID:9147 and SEQ ID:6497 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52752] Another function of GAM7776 is therefore inhibition of LOC220074 (Accession NP_660352.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC220074.

[52753] LOC221174 (Accession XP_167915.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC221174 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by

LOC221174, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC221174 BINDING SITE, designated SEQ ID:17256, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52754] Another function of GAM7776 is therefore inhibition of LOC221174 (Accession XP_167915.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC221174.

[52755] LOC221663 (Accession XP_168131.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC221663 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC221663, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC221663 BINDING SITE, designated SEQ ID:1939, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52756] Another function of GAM7776 is therefore inhibition of LOC221663 (Accession XP_168131.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC221663.

[52757] LOC221946 (Accession XP_168340.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC221946 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC221946, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC221946 BINDING SITE, designated SEQ ID:15948, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52758] Another function of GAM7776 is therefore inhibition of LOC221946 (Accession XP_168340.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC221946.

[52759] LOC221960 (Accession XP_165859.1) is another GAM7776 target gene, herein designated TARGET GENE.

LOC221960 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC221960, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC221960 BINDING SITE, designated SEQ ID:14860, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52760] Another function of GAM7776 is therefore inhibition of LOC221960 (Accession XP_165859.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC221960.

[52761] LOC221964 (Accession XP_168342.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC221964 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC221964, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC221964 BINDING SITE, designated SEQ ID:17029, to the nucleotide sequence of

GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52762] Another function of GAM7776 is therefore inhibition of LOC221964 (Accession XP_168342.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC221964.

[52763] LOC222057 (Accession XP_166594.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC222057 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC222057, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC222057 BINDING SITE, designated SEQ ID:12803, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52764] Another function of GAM7776 is therefore inhibition of LOC222057 (Accession XP_166594.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC222057.

[52765] LOC222068 (Accession XP_166556.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC222068 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC222068, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC222068 BINDING SITE, designated SEQ ID:3232, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52766] Another function of GAM7776 is therefore inhibition of LOC222068 (Accession XP_166556.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC222068.

[52767] LOC222159 (Accession XP_212100.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC222159 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by LOC222159, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the comple-

mentarity of the nucleotide sequences of LOC222159 BINDING SITE, designated SEQ ID:16228, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52768] Another function of GAM7776 is therefore inhibition of LOC222159 (Accession XP_212100.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC222159.

[52769] LOC252983 (Accession XP_170858.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC252983 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC252983, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC252983 BINDING SITE, designated SEQ ID:2959, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52770] Another function of GAM7776 is therefore inhibition of LOC252983 (Accession XP_170858.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC252983.

[52771] LOC253612 (Accession XP_172985.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC253612 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC253612, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC253612 BINDING SITE, designated SEQ ID:5487, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52772] Another function of GAM7776 is therefore inhibition of LOC253612 (Accession XP_172985.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC253612.

[52773] LOC253805 (Accession XP_172854.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC253805 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC253805, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC253805 BINDING SITE, designated SEQ ID:4532, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52774] Another function of GAM7776 is therefore inhibition of LOC253805 (Accession XP_172854.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC253805.

[52775] LOC254875 (Accession XP_171170.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC254875 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC254875, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC254875 BINDING SITE, designated SEQ ID:6188, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52776] Another function of GAM7776 is therefore inhibition of

LOC254875 (Accession XP_171170.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC254875.

[52777] LOC255031 (Accession XP_173187.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC255031 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC255031, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC255031 BINDING SITE, designated SEQ ID:3261, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52778] Another function of GAM7776 is therefore inhibition of LOC255031 (Accession XP_173187.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC255031.

[52779] LOC255177 (Accession XP_172941.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC255177 BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by LOC255177, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC255177 BINDING SITE, designated SEQ ID:6294, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52780] Another function of GAM7776 is therefore inhibition of LOC255177 (Accession XP_172941.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC255177.

[52781] LOC255458 (Accession XP_173150.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC255458 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC255458, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC255458 BINDING SITE, designated SEQ ID:6365, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also design-

nated SEQ ID:246.

[52782] Another function of GAM7776 is therefore inhibition of LOC255458 (Accession XP_173150.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC255458.

[52783] LOC255488 (Accession XP_172581.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC255488 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC255488, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC255488 BINDING SITE, designated SEQ ID:3150, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52784] Another function of GAM7776 is therefore inhibition of LOC255488 (Accession XP_172581.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC255488.

[52785] LOC255975 (Accession XP_171083.2) is another

GAM7776 target gene, herein designated TARGET GENE. LOC255975 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC255975, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC255975 BINDING SITE, designated SEQ ID:12803, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52786] Another function of GAM7776 is therefore inhibition of LOC255975 (Accession XP_171083.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC255975.

[52787] LOC256614 (Accession XP_172864.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC256614 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC256614, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC256614 BINDING SITE, design-

nated SEQ ID:7385, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52788] Another function of GAM7776 is therefore inhibition of LOC256614 (Accession XP_172864.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC256614.

[52789] LOC282905 (Accession XP_212606.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC282905 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC282905, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC282905 BINDING SITE, designated SEQ ID:986, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52790] Another function of GAM7776 is therefore inhibition of LOC282905 (Accession XP_212606.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC282905.

[52791] LOC282943 (Accession XP_212647.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC282943 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC282943, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC282943 BINDING SITE, designated SEQ ID:986, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52792] Another function of GAM7776 is therefore inhibition of LOC282943 (Accession XP_212647.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC282943.

[52793] LOC282963 (Accession XP_210834.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC282963 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC282963, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC282963 BINDING SITE, designated SEQ ID:814, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52794] Another function of GAM7776 is therefore inhibition of LOC282963 (Accession XP_210834.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC282963.

[52795] LOC282972 (Accession XP_210837.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC282972 BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by LOC282972, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC282972 BINDING SITE, designated SEQ ID:18172, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52796] Another function of GAM7776 is therefore inhibition of LOC282972 (Accession XP_210837.1) . Accordingly, utili-

ties of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC282972.

[52797] LOC282987 (Accession XP_210845.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC282987 BINDING SITE1 and LOC282987 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC282987, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC282987 BINDING SITE1 and LOC282987 BINDING SITE2, designated SEQ ID:12068 and SEQ ID:16541 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52798] Another function of GAM7776 is therefore inhibition of LOC282987 (Accession XP_210845.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC282987.

[52799] LOC282997 (Accession XP_208473.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC282997 BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by LOC282997, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC282997 BINDING SITE, designated SEQ ID:11798, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52800] Another function of GAM7776 is therefore inhibition of LOC282997 (Accession XP_208473.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC282997.

[52801] LOC283047 (Accession XP_210870.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283047 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283047, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283047 BINDING SITE, designated SEQ ID:17587, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also design-

nated SEQ ID:246.

[52802] Another function of GAM7776 is therefore inhibition of LOC283047 (Accession XP_210870.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283047.

[52803] LOC283061 (Accession XP_210875.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283061 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283061, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283061 BINDING SITE, designated SEQ ID:7252, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52804] Another function of GAM7776 is therefore inhibition of LOC283061 (Accession XP_210875.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283061.

[52805] LOC283087 (Accession XP_208509.1) is another

GAM7776 target gene, herein designated TARGET GENE. LOC283087 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283087, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283087 BINDING SITE, designated SEQ ID:4176, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52806] Another function of GAM7776 is therefore inhibition of LOC283087 (Accession XP_208509.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283087.

[52807] LOC283089 (Accession XP_210885.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283089 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC283089, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283089 BINDING SITE, design-

nated SEQ ID:2219, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52808] Another function of GAM7776 is therefore inhibition of LOC283089 (Accession XP_210885.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283089.

[52809] LOC283119 (Accession XP_210895.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283119 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283119, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283119 BINDING SITE, designated SEQ ID:16397, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52810] Another function of GAM7776 is therefore inhibition of LOC283119 (Accession XP_210895.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC283119.

[52811] LOC283130 (Accession XP_208525.3) is another GAM7776 target gene, herein designated TARGET GENE. LOC283130 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283130, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283130 BINDING SITE, designated SEQ ID:5323, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52812] Another function of GAM7776 is therefore inhibition of LOC283130 (Accession XP_208525.3) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283130.

[52813] LOC283140 (Accession XP_210911.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283140 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283140, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283140 BINDING SITE, designated SEQ ID:12544, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52814] Another function of GAM7776 is therefore inhibition of LOC283140 (Accession XP_210911.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283140.

[52815] LOC283142 (Accession XP_210925.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283142 BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by LOC283142, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283142 BINDING SITE, designated SEQ ID:19977, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52816] Another function of GAM7776 is therefore inhibition of LOC283142 (Accession XP_210925.1) . Accordingly, utili-

ties of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283142.

[52817] LOC283143 (Accession XP_210920.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283143 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283143, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283143 BINDING SITE, designated SEQ ID:2650, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52818] Another function of GAM7776 is therefore inhibition of LOC283143 (Accession XP_210920.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283143.

[52819] LOC283152 (Accession XP_210917.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC283152 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by

LOC283152, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283152 BINDING SITE, designated SEQ ID:19812, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52820] Another function of GAM7776 is therefore inhibition of LOC283152 (Accession XP_210917.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283152.

[52821] LOC283170 (Accession XP_208535.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283170 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283170, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283170 BINDING SITE, designated SEQ ID:4979, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52822] Another function of GAM7776 is therefore inhibition of LOC283170 (Accession XP_208535.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283170.

[52823] LOC283177 (Accession XP_210903.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283177 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283177, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283177 BINDING SITE, designated SEQ ID:15574, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52824] Another function of GAM7776 is therefore inhibition of LOC283177 (Accession XP_210903.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283177.

[52825] LOC283215 (Accession XP_208555.2) is another GAM7776 target gene, herein designated TARGET GENE.

LOC283215 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283215, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283215 BINDING SITE, designated SEQ ID:10112, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52826] Another function of GAM7776 is therefore inhibition of LOC283215 (Accession XP_208555.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283215.

[52827] LOC283241 (Accession NP_787089.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283241 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC283241, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283241 BINDING SITE, designated SEQ ID:9525, to the nucleotide sequence of

GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52828] Another function of GAM7776 is therefore inhibition of LOC283241 (Accession NP_787089.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283241.

[52829] LOC283244 (Accession XP_208583.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC283244 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283244, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283244 BINDING SITE, designated SEQ ID:4496, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52830] Another function of GAM7776 is therefore inhibition of LOC283244 (Accession XP_208583.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283244.

[52831] LOC283262 (Accession XP_210952.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283262 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC283262, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283262 BINDING SITE, designated SEQ ID:8223, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52832] Another function of GAM7776 is therefore inhibition of LOC283262 (Accession XP_210952.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283262.

[52833] LOC283278 (Accession XP_210961.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283278 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283278, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC283278 BINDING SITE, designated SEQ ID:9036, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52834] Another function of GAM7776 is therefore inhibition of LOC283278 (Accession XP_210961.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283278.

[52835] LOC283293 (Accession XP_210962.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283293 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283293, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283293 BINDING SITE, designated SEQ ID:17952, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52836] Another function of GAM7776 is therefore inhibition of LOC283293 (Accession XP_210962.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC283293.

[52837] LOC283299 (Accession XP_210965.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283299 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC283299, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283299 BINDING SITE, designated SEQ ID:9585, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52838] Another function of GAM7776 is therefore inhibition of LOC283299 (Accession XP_210965.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283299.

[52839] LOC283329 (Accession XP_210978.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283329 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC283329, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283329 BINDING SITE, designated SEQ ID:2201, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52840] Another function of GAM7776 is therefore inhibition of LOC283329 (Accession XP_210978.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283329.

[52841] LOC283335 (Accession XP_210981.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283335 BINDING SITE1 and LOC283335 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC283335, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283335 BINDING SITE1 and LOC283335 BINDING SITE2, designated SEQ ID:2143 and SEQ ID:16144 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52842] Another function of GAM7776 is therefore inhibition of LOC283335 (Accession XP_210981.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283335.

[52843] LOC283377 (Accession XP_208647.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283377 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283377, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283377 BINDING SITE, designated SEQ ID:8232, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52844] Another function of GAM7776 is therefore inhibition of LOC283377 (Accession XP_208647.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283377.

[52845] LOC283387 (Accession XP_211007.1) is another GAM7776 target gene, herein designated TARGET GENE.

LOC283387 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283387, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283387 BINDING SITE, designated SEQ ID:7265, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52846] Another function of GAM7776 is therefore inhibition of LOC283387 (Accession XP_211007.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283387.

[52847] LOC283394 (Accession XP_211021.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283394 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC283394, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283394 BINDING SITE, designated SEQ ID:1730, to the nucleotide sequence of

GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52848] Another function of GAM7776 is therefore inhibition of LOC283394 (Accession XP_211021.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283394.

[52849] LOC283395 (Accession XP_211020.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283395 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283395, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283395 BINDING SITE, designated SEQ ID:9003, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52850] Another function of GAM7776 is therefore inhibition of LOC283395 (Accession XP_211020.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283395.

[52851] LOC283400 (Accession XP_211024.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283400 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC283400, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283400 BINDING SITE, designated SEQ ID:19206, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52852] Another function of GAM7776 is therefore inhibition of LOC283400 (Accession XP_211024.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283400.

[52853] LOC283432 (Accession XP_211032.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283432 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC283432, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC283432 BINDING SITE, designated SEQ ID:16658, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52854] Another function of GAM7776 is therefore inhibition of LOC283432 (Accession XP_211032.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283432.

[52855] LOC283441 (Accession XP_211043.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283441 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283441, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283441 BINDING SITE, designated SEQ ID:2220, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52856] Another function of GAM7776 is therefore inhibition of LOC283441 (Accession XP_211043.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC283441.

[52857] LOC283442 (Accession XP_211037.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283442 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC283442, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283442 BINDING SITE, designated SEQ ID:10032, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52858] Another function of GAM7776 is therefore inhibition of LOC283442 (Accession XP_211037.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283442.

[52859] LOC283445 (Accession XP_211044.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283445 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC283445, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283445 BINDING SITE, designated SEQ ID:5683, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52860] Another function of GAM7776 is therefore inhibition of LOC283445 (Accession XP_211044.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283445.

[52861] LOC283452 (Accession XP_208679.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283452 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC283452, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283452 BINDING SITE, designated SEQ ID:7397, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52862] Another function of GAM7776 is therefore inhibition of

LOC283452 (Accession XP_208679.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283452.

[52863] LOC283454 (Accession XP_211049.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283454 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC283454, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283454 BINDING SITE, designated SEQ ID:14861, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52864] Another function of GAM7776 is therefore inhibition of LOC283454 (Accession XP_211049.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283454.

[52865] LOC283467 (Accession XP_211050.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283467 BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by LOC283467, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283467 BINDING SITE, designated SEQ ID:13967, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52866] Another function of GAM7776 is therefore inhibition of LOC283467 (Accession XP_211050.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283467.

[52867] LOC283475 (Accession XP_211056.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283475 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283475, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283475 BINDING SITE, designated SEQ ID:9892, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also design-

nated SEQ ID:246.

[52868] Another function of GAM7776 is therefore inhibition of LOC283475 (Accession XP_211056.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283475.

[52869] LOC283484 (Accession XP_211053.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283484 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC283484, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283484 BINDING SITE, designated SEQ ID:17710, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52870] Another function of GAM7776 is therefore inhibition of LOC283484 (Accession XP_211053.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283484.

[52871] LOC283487 (Accession XP_211062.1) is another

GAM7776 target gene, herein designated TARGET GENE. LOC283487 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by LOC283487, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283487 BINDING SITE, designated SEQ ID:7371, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52872] Another function of GAM7776 is therefore inhibition of LOC283487 (Accession XP_211062.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283487.

[52873] LOC283507 (Accession XP_211075.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283507 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283507, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283507 BINDING SITE, design-

nated SEQ ID:12075, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52874] Another function of GAM7776 is therefore inhibition of LOC283507 (Accession XP_211075.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283507.

[52875] LOC283534 (Accession XP_211083.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283534 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283534, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283534 BINDING SITE, designated SEQ ID:3199, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52876] Another function of GAM7776 is therefore inhibition of LOC283534 (Accession XP_211083.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC283534.

[52877] LOC283570 (Accession XP_211118.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283570 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283570, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283570 BINDING SITE, designated SEQ ID:13652, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52878] Another function of GAM7776 is therefore inhibition of LOC283570 (Accession XP_211118.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283570.

[52879] LOC283575 (Accession XP_211095.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283575 BINDING SITE1 and LOC283575 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC283575, corresponding to target binding sites such as BINDING SITE I, BINDING SITE

II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283575 BINDING SITE1 and LOC283575 BINDING SITE2, designated SEQ ID:10067 and SEQ ID:6183 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52880] Another function of GAM7776 is therefore inhibition of LOC283575 (Accession XP_211095.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283575.

[52881] LOC283585 (Accession XP_294741.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283585 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC283585, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283585 BINDING SITE, designated SEQ ID:10466, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52882] Another function of GAM7776 is therefore inhibition of

LOC283585 (Accession XP_294741.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283585.

[52883] LOC283588 (Accession NP_787093.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283588 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283588, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283588 BINDING SITE, designated SEQ ID:10638, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52884] Another function of GAM7776 is therefore inhibition of LOC283588 (Accession NP_787093.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283588.

[52885] LOC283624 (Accession XP_211126.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283624 BINDING SITE is a target binding site found in

the 5' untranslated region of mRNA encoded by LOC283624, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283624 BINDING SITE, designated SEQ ID:4420, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52886] Another function of GAM7776 is therefore inhibition of LOC283624 (Accession XP_211126.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283624.

[52887] LOC283637 (Accession XP_211134.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283637 BINDING SITE1 and LOC283637 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC283637, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283637 BINDING SITE1 and LOC283637 BINDING SITE2, designated SEQ ID:14859 and SEQ ID:3581 respectively, to the

nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52888] Another function of GAM7776 is therefore inhibition of LOC283637 (Accession XP_211134.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283637.

[52889] LOC283641 (Accession XP_208764.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283641 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283641, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283641 BINDING SITE, designated SEQ ID:17964, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52890] Another function of GAM7776 is therefore inhibition of LOC283641 (Accession XP_208764.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283641.

[52891] LOC283663 (Accession XP_211147.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283663 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC283663, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283663 BINDING SITE, designated SEQ ID:16674, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52892] Another function of GAM7776 is therefore inhibition of LOC283663 (Accession XP_211147.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283663.

[52893] LOC283664 (Accession XP_208773.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283664 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC283664, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC283664 BINDING SITE, designated SEQ ID:8450, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52894] Another function of GAM7776 is therefore inhibition of LOC283664 (Accession XP_208773.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283664.

[52895] LOC283672 (Accession XP_211152.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283672 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC283672, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283672 BINDING SITE, designated SEQ ID:1730, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52896] Another function of GAM7776 is therefore inhibition of LOC283672 (Accession XP_211152.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC283672.

[52897] LOC283687 (Accession NP_787094.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283687 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283687, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283687 BINDING SITE, designated SEQ ID:11904, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52898] Another function of GAM7776 is therefore inhibition of LOC283687 (Accession NP_787094.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283687.

[52899] LOC283693 (Accession XP_208788.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283693 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283693, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283693 BINDING SITE, designated SEQ ID:5305, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52900] Another function of GAM7776 is therefore inhibition of LOC283693 (Accession XP_208788.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283693.

[52901] LOC283701 (Accession XP_211170.3) is another GAM7776 target gene, herein designated TARGET GENE. LOC283701 BINDING SITE1 and LOC283701 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC283701, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283701 BINDING SITE1 and LOC283701 BINDING SITE2, designated SEQ ID:13716 and SEQ ID:14381 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52902] Another function of GAM7776 is therefore inhibition of LOC283701 (Accession XP_211170.3) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283701.

[52903] LOC283723 (Accession XP_211176.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283723 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC283723, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283723 BINDING SITE, designated SEQ ID:9256, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52904] Another function of GAM7776 is therefore inhibition of LOC283723 (Accession XP_211176.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283723.

[52905] LOC283741 (Accession XP_208115.1) is another GAM7776 target gene, herein designated TARGET GENE.

LOC283741 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283741, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283741 BINDING SITE, designated SEQ ID:11523, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52906] Another function of GAM7776 is therefore inhibition of LOC283741 (Accession XP_208115.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283741.

[52907] LOC283767 (Accession XP_208835.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283767 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283767, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283767 BINDING SITE, designated SEQ ID:12479, to the nucleotide sequence of

GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52908] Another function of GAM7776 is therefore inhibition of LOC283767 (Accession XP_208835.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283767.

[52909] LOC283778 (Accession XP_211199.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283778 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC283778, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283778 BINDING SITE, designated SEQ ID:4370, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52910] Another function of GAM7776 is therefore inhibition of LOC283778 (Accession XP_211199.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283778.

[52911] LOC283779 (Accession XP_211198.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283779 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283779, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283779 BINDING SITE, designated SEQ ID:17644, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52912] Another function of GAM7776 is therefore inhibition of LOC283779 (Accession XP_211198.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283779.

[52913] LOC283801 (Accession XP_208122.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283801 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283801, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC283801 BINDING SITE, designated SEQ ID:6265, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52914] Another function of GAM7776 is therefore inhibition of LOC283801 (Accession XP_208122.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283801.

[52915] LOC283802 (Accession XP_208850.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283802 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283802, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283802 BINDING SITE, designated SEQ ID:16700, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52916] Another function of GAM7776 is therefore inhibition of LOC283802 (Accession XP_208850.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC283802.

[52917] LOC283818 (Accession XP_211218.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283818 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283818, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283818 BINDING SITE, designated SEQ ID:9546, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52918] Another function of GAM7776 is therefore inhibition of LOC283818 (Accession XP_211218.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283818.

[52919] LOC283849 (Accession XP_208870.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283849 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by LOC283849, corresponding to a target

binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283849 BINDING SITE, designated SEQ ID:4308, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52920] Another function of GAM7776 is therefore inhibition of LOC283849 (Accession XP_208870.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283849.

[52921] LOC283849 (Accession NP_848611.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283849 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by LOC283849, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283849 BINDING SITE, designated SEQ ID:4308, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52922] Another function of GAM7776 is therefore inhibition of

LOC283849 (Accession NP_848611.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283849.

[52923] LOC283851 (Accession XP_211229.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283851 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283851, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283851 BINDING SITE, designated SEQ ID:4974, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52924] Another function of GAM7776 is therefore inhibition of LOC283851 (Accession XP_211229.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283851.

[52925] LOC283856 (Accession XP_211233.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283856 BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by LOC283856, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283856 BINDING SITE, designated SEQ ID:6184, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52926] Another function of GAM7776 is therefore inhibition of LOC283856 (Accession XP_211233.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283856.

[52927] LOC283861 (Accession NP_787095.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283861 BINDING SITE1 and LOC283861 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC283861, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283861 BINDING SITE1 and LOC283861 BINDING SITE2, designated SEQ ID:1401 and SEQ ID:1635 respectively, to the

nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52928] Another function of GAM7776 is therefore inhibition of LOC283861 (Accession NP_787095.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283861.

[52929] LOC283863 (Accession XP_208875.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283863 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283863, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283863 BINDING SITE, designated SEQ ID:13285, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52930] Another function of GAM7776 is therefore inhibition of LOC283863 (Accession XP_208875.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283863.

[52931] LOC283887 (Accession XP_211248.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC283887 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC283887, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283887 BINDING SITE, designated SEQ ID:18993, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52932] Another function of GAM7776 is therefore inhibition of LOC283887 (Accession XP_211248.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283887.

[52933] LOC283888 (Accession XP_211249.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283888 BINDING SITE1 and LOC283888 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC283888, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the com-

plementarity of the nucleotide sequences of LOC283888 BINDING SITE1 and LOC283888 BINDING SITE2, designated SEQ ID:14104 and SEQ ID:11072 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52934] Another function of GAM7776 is therefore inhibition of LOC283888 (Accession XP_211249.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283888.

[52935] LOC283889 (Accession XP_208899.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283889 BINDING SITE1 and LOC283889 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC283889, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283889 BINDING SITE1 and LOC283889 BINDING SITE2, designated SEQ ID:10739 and SEQ ID:3899 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52936] Another function of GAM7776 is therefore inhibition of

LOC283889 (Accession XP_208899.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283889.

[52937] LOC283928 (Accession XP_208909.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC283928 BINDING SITE1 and LOC283928 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC283928, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283928 BINDING SITE1 and LOC283928 BINDING SITE2, designated SEQ ID:20101 and SEQ ID:4703 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52938] Another function of GAM7776 is therefore inhibition of LOC283928 (Accession XP_208909.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283928.

[52939] LOC283929 (Accession XP_208905.2) is another GAM7776 target gene, herein designated TARGET GENE.

LOC283929 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC283929, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283929 BINDING SITE, designated SEQ ID:15775, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52940] Another function of GAM7776 is therefore inhibition of LOC283929 (Accession XP_208905.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283929.

[52941] LOC283964 (Accession XP_208145.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC283964 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283964, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283964 BINDING SITE, designated SEQ ID:19569, to the nucleotide sequence of

GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52942] Another function of GAM7776 is therefore inhibition of LOC283964 (Accession XP_208145.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283964.

[52943] LOC284001 (Accession XP_208958.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC284001 BINDING SITE1 and LOC284001 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC284001, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284001 BINDING SITE1 and LOC284001 BINDING SITE2, designated SEQ ID:11764 and SEQ ID:18161 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52944] Another function of GAM7776 is therefore inhibition of LOC284001 (Accession XP_208958.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC284001.

[52945] LOC284016 (Accession XP_211298.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284016 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284016, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284016 BINDING SITE, designated SEQ ID:3244, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52946] Another function of GAM7776 is therefore inhibition of LOC284016 (Accession XP_211298.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284016.

[52947] LOC284017 (Accession XP_208961.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284017 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284017, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284017 BINDING SITE, designated SEQ ID:18610, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52948] Another function of GAM7776 is therefore inhibition of LOC284017 (Accession XP_208961.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284017.

[52949] LOC284019 (Accession XP_211302.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284019 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284019, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284019 BINDING SITE, designated SEQ ID:10124, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52950] Another function of GAM7776 is therefore inhibition of LOC284019 (Accession XP_211302.1) . Accordingly, utili-

ties of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284019.

[52951] LOC284023 (Accession XP_208983.3) is another GAM7776 target gene, herein designated TARGET GENE. LOC284023 BINDING SITE1 and LOC284023 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC284023, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284023 BINDING SITE1 and LOC284023 BINDING SITE2, designated SEQ ID:14597 and SEQ ID:17953 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52952] Another function of GAM7776 is therefore inhibition of LOC284023 (Accession XP_208983.3) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284023.

[52953] LOC284048 (Accession XP_208152.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284048 BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by LOC284048, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284048 BINDING SITE, designated SEQ ID:10847, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52954] Another function of GAM7776 is therefore inhibition of LOC284048 (Accession XP_208152.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284048.

[52955] LOC284074 (Accession XP_211321.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284074 BINDING SITE1 and LOC284074 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC284074, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284074 BINDING SITE1 and LOC284074 BINDING SITE2, designated SEQ ID:15531 and SEQ ID:1596 respectively, to the

nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52956] Another function of GAM7776 is therefore inhibition of LOC284074 (Accession XP_211321.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284074.

[52957] LOC284082 (Accession XP_211323.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284082 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284082, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284082 BINDING SITE, designated SEQ ID:18527, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52958] Another function of GAM7776 is therefore inhibition of LOC284082 (Accession XP_211323.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284082.

[52959] LOC284095 (Accession XP_211324.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284095 BINDING SITE1 through LOC284095 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC284095, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284095 BINDING SITE1 through LOC284095 BINDING SITE3, designated SEQ ID:11799, SEQ ID:15513 and SEQ ID:7333 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52960] Another function of GAM7776 is therefore inhibition of LOC284095 (Accession XP_211324.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284095.

[52961] LOC284098 (Accession XP_209008.3) is another GAM7776 target gene, herein designated TARGET GENE. LOC284098 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284098, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284098 BINDING SITE, designated SEQ ID:8582, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52962] Another function of GAM7776 is therefore inhibition of LOC284098 (Accession XP_209008.3) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284098.

[52963] LOC284100 (Accession XP_209015.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284100 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284100, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284100 BINDING SITE, designated SEQ ID:1777, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52964] Another function of GAM7776 is therefore inhibition of LOC284100 (Accession XP_209015.1) . Accordingly, utili-

ties of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284100.

[52965] LOC284101 (Accession XP_209019.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284101 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC284101, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284101 BINDING SITE, designated SEQ ID:19537, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52966] Another function of GAM7776 is therefore inhibition of LOC284101 (Accession XP_209019.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284101.

[52967] LOC284102 (Accession XP_211327.3) is another GAM7776 target gene, herein designated TARGET GENE. LOC284102 BINDING SITE1 through LOC284102 BINDING SITE3 are target binding sites found in untranslated re-

gions of mRNA encoded by LOC284102, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284102 BINDING SITE1 through LOC284102 BINDING SITE3, designated SEQ ID:18149, SEQ ID:7745 and SEQ ID:3233 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52968] Another function of GAM7776 is therefore inhibition of LOC284102 (Accession XP_211327.3) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284102.

[52969] LOC284128 (Accession XP_211342.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284128 BINDING SITE1 and LOC284128 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC284128, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284128 BINDING SITE1 and LOC284128 BINDING SITE2, designated SEQ ID:1966 and SEQ ID:17271 respectively, to the

nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52970] Another function of GAM7776 is therefore inhibition of LOC284128 (Accession XP_211342.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284128.

[52971] LOC284135 (Accession XP_209032.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284135 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284135, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284135 BINDING SITE, designated SEQ ID:12779, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52972] Another function of GAM7776 is therefore inhibition of LOC284135 (Accession XP_209032.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284135.

[52973] LOC284145 (Accession XP_211353.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284145 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC284145, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284145 BINDING SITE, designated SEQ ID:4102, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52974] Another function of GAM7776 is therefore inhibition of LOC284145 (Accession XP_211353.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284145.

[52975] LOC284171 (Accession XP_209051.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284171 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284171, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC284171 BINDING SITE, designated SEQ ID:11530, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52976] Another function of GAM7776 is therefore inhibition of LOC284171 (Accession XP_209051.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284171.

[52977] LOC284183 (Accession XP_209059.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284183 BINDING SITE1 and LOC284183 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC284183, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284183 BINDING SITE1 and LOC284183 BINDING SITE2, designated SEQ ID:1111 and SEQ ID:9456 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52978] Another function of GAM7776 is therefore inhibition of LOC284183 (Accession XP_209059.1) . Accordingly, utili-

ties of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284183.

[52979] LOC284186 (Accession XP_209060.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC284186 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284186, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284186 BINDING SITE, designated SEQ ID:14861, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52980] Another function of GAM7776 is therefore inhibition of LOC284186 (Accession XP_209060.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284186.

[52981] LOC284191 (Accession XP_211377.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284191 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by

LOC284191, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284191 BINDING SITE, designated SEQ ID:4421, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52982] Another function of GAM7776 is therefore inhibition of LOC284191 (Accession XP_211377.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284191.

[52983] LOC284202 (Accession XP_208174.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC284202 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284202, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284202 BINDING SITE, designated SEQ ID:3800, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52984] Another function of GAM7776 is therefore inhibition of LOC284202 (Accession XP_208174.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284202.

[52985] LOC284267 (Accession XP_211411.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284267 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC284267, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284267 BINDING SITE, designated SEQ ID:8494, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52986] Another function of GAM7776 is therefore inhibition of LOC284267 (Accession XP_211411.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284267.

[52987] LOC284276 (Accession XP_211412.1) is another GAM7776 target gene, herein designated TARGET GENE.

LOC284276 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC284276, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284276 BINDING SITE, designated SEQ ID:1026, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52988] Another function of GAM7776 is therefore inhibition of LOC284276 (Accession XP_211412.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284276.

[52989] LOC284286 (Accession XP_211419.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284286 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284286, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284286 BINDING SITE, designated SEQ ID:19875, to the nucleotide sequence of

GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52990] Another function of GAM7776 is therefore inhibition of LOC284286 (Accession XP_211419.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284286.

[52991] LOC284289 (Accession XP_209105.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284289 BINDING SITE1 and LOC284289 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC284289, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284289 BINDING SITE1 and LOC284289 BINDING SITE2, designated SEQ ID:16648 and SEQ ID:1885 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52992] Another function of GAM7776 is therefore inhibition of LOC284289 (Accession XP_209105.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC284289.

[52993] LOC284297 (Accession XP_209112.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284297 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284297, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284297 BINDING SITE, designated SEQ ID:1751, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52994] Another function of GAM7776 is therefore inhibition of LOC284297 (Accession XP_209112.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284297.

[52995] LOC284304 (Accession XP_211426.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284304 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284304, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284304 BINDING SITE, designated SEQ ID:4849, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52996] Another function of GAM7776 is therefore inhibition of LOC284304 (Accession XP_211426.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284304.

[52997] LOC284317 (Accession XP_209162.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284317 BINDING SITE1 and LOC284317 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC284317, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284317 BINDING SITE1 and LOC284317 BINDING SITE2, designated SEQ ID:7077 and SEQ ID:3386 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[52998] Another function of GAM7776 is therefore inhibition of

LOC284317 (Accession XP_209162.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284317.

[52999] LOC284325 (Accession XP_209143.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284325 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284325, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284325 BINDING SITE, designated SEQ ID:1731, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53000] Another function of GAM7776 is therefore inhibition of LOC284325 (Accession XP_209143.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284325.

[53001] LOC284356 (Accession XP_211437.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284356 BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by LOC284356, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284356 BINDING SITE, designated SEQ ID:11986, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53002] Another function of GAM7776 is therefore inhibition of LOC284356 (Accession XP_211437.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284356.

[53003] LOC284362 (Accession XP_211435.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284362 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284362, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284362 BINDING SITE, designated SEQ ID:18898, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also design-

nated SEQ ID:246.

[53004] Another function of GAM7776 is therefore inhibition of LOC284362 (Accession XP_211435.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284362.

[53005] LOC284375 (Accession XP_209154.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284375 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284375, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284375 BINDING SITE, designated SEQ ID:16701, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53006] Another function of GAM7776 is therefore inhibition of LOC284375 (Accession XP_209154.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284375.

[53007] LOC284376 (Accession XP_209157.1) is another

GAM7776 target gene, herein designated TARGET GENE. LOC284376 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284376, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284376 BINDING SITE, designated SEQ ID:19718, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53008] Another function of GAM7776 is therefore inhibition of LOC284376 (Accession XP_209157.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284376.

[53009] LOC284379 (Accession XP_209163.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284379 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284379, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284379 BINDING SITE, designated SEQ ID:9312, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53010] Another function of GAM7776 is therefore inhibition of LOC284379 (Accession XP_209163.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284379.

[53011] LOC284395 (Accession XP_211454.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284395 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC284395, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC284395 BINDING SITE, designated SEQ ID:16459, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53012] Another function of GAM7776 is therefore inhibition of LOC284395 (Accession XP_211454.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284395.

[53013] LOC284396 (Accession XP_211452.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284396 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284396, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284396 BINDING SITE, designated SEQ ID:10399, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53014] Another function of GAM7776 is therefore inhibition of LOC284396 (Accession XP_211452.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC284396.

[53015] LOC284405 (Accession XP_209183.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC284405 BINDING SITE1 and LOC284405 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC284405, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284405 BINDING SITE1 and LOC284405 BINDING SITE2, designated SEQ ID:19462 and SEQ ID:2645 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53016] Another function of GAM7776 is therefore inhibition of LOC284405 (Accession XP_209183.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284405.

[53017] LOC284408 (Accession XP_211443.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284408 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by

LOC284408, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284408 BINDING SITE, designated SEQ ID:14364, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53018] Another function of GAM7776 is therefore inhibition of LOC284408 (Accession XP_211443.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284408.

[53019] LOC284410 (Accession XP_211449.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284410 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284410, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284410 BINDING SITE, designated SEQ ID:17304, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53020] Another function of GAM7776 is therefore inhibition of LOC284410 (Accession XP_211449.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284410.

[53021] LOC284421 (Accession XP_209200.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284421 BINDING SITE1 and LOC284421 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC284421, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284421 BINDING SITE1 and LOC284421 BINDING SITE2, designated SEQ ID:4533 and SEQ ID:15844 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53022] Another function of GAM7776 is therefore inhibition of LOC284421 (Accession XP_209200.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284421.

[53023] LOC284421 (Accession XP_209200.1) is another

GAM7776 target gene, herein designated TARGET GENE. LOC284421 BINDING SITE1 and LOC284421 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC284421, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284421 BINDING SITE1 and LOC284421 BINDING SITE2, designated SEQ ID:15844 and SEQ ID:13177 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53024] Another function of GAM7776 is therefore inhibition of LOC284421 (Accession XP_209200.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284421.

[53025] LOC284426 (Accession XP_209198.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284426 BINDING SITE1 through LOC284426 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC284426, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the com-

plementarity of the nucleotide sequences of LOC284426 BINDING SITE1 through LOC284426 BINDING SITE3, designated SEQ ID:4975, SEQ ID:5357 and SEQ ID:8752 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53026] Another function of GAM7776 is therefore inhibition of LOC284426 (Accession XP_209198.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284426.

[53027] LOC284454 (Accession XP_209216.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284454 BINDING SITE1 through LOC284454 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC284454, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284454 BINDING SITE1 through LOC284454 BINDING SITE3, designated SEQ ID:19117, SEQ ID:3999 and SEQ ID:16031 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53028] Another function of GAM7776 is therefore inhibition of

LOC284454 (Accession XP_209216.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284454.

[53029] LOC284456 (Accession XP_211470.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284456 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284456, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284456 BINDING SITE, designated SEQ ID:18777, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53030] Another function of GAM7776 is therefore inhibition of LOC284456 (Accession XP_211470.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284456.

[53031] LOC284471 (Accession XP_209225.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284471 BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by LOC284471, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284471 BINDING SITE, designated SEQ ID:19286, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53032] Another function of GAM7776 is therefore inhibition of LOC284471 (Accession XP_209225.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284471.

[53033] LOC284512 (Accession XP_211500.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284512 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284512, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284512 BINDING SITE, designated SEQ ID:14119, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also design-

nated SEQ ID:246.

[53034] Another function of GAM7776 is therefore inhibition of LOC284512 (Accession XP_211500.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284512.

[53035] LOC284513 (Accession XP_211502.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284513 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC284513, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284513 BINDING SITE, designated SEQ ID:18865, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53036] Another function of GAM7776 is therefore inhibition of LOC284513 (Accession XP_211502.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284513.

[53037] LOC284549 (Accession XP_211514.1) is another

GAM7776 target gene, herein designated TARGET GENE. LOC284549 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC284549, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284549 BINDING SITE, designated SEQ ID:19112, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53038] Another function of GAM7776 is therefore inhibition of LOC284549 (Accession XP_211514.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284549.

[53039] LOC284551 (Accession XP_211515.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284551 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284551, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284551 BINDING SITE, design-

nated SEQ ID:9493, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53040] Another function of GAM7776 is therefore inhibition of LOC284551 (Accession XP_211515.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284551.

[53041] LOC284577 (Accession XP_211522.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284577 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284577, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284577 BINDING SITE, designated SEQ ID:19533, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53042] Another function of GAM7776 is therefore inhibition of LOC284577 (Accession XP_211522.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC284577.

[53043] LOC284587 (Accession XP_209278.3) is another GAM7776 target gene, herein designated TARGET GENE. LOC284587 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC284587, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284587 BINDING SITE, designated SEQ ID:12803, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53044] Another function of GAM7776 is therefore inhibition of LOC284587 (Accession XP_209278.3) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284587.

[53045] LOC284611 (Accession XP_211552.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284611 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284611, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284611 BINDING SITE, designated SEQ ID:12497, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53046] Another function of GAM7776 is therefore inhibition of LOC284611 (Accession XP_211552.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284611.

[53047] LOC284628 (Accession XP_211561.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284628 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC284628, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284628 BINDING SITE, designated SEQ ID:18882, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53048] Another function of GAM7776 is therefore inhibition of LOC284628 (Accession XP_211561.1) . Accordingly, utili-

ties of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284628.

[53049] LOC284675 (Accession XP_209319.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284675 BINDING SITE1 and LOC284675 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC284675, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284675 BINDING SITE1 and LOC284675 BINDING SITE2, designated SEQ ID:501 and SEQ ID:2389 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53050] Another function of GAM7776 is therefore inhibition of LOC284675 (Accession XP_209319.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284675.

[53051] LOC284683 (Accession XP_208236.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284683 BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by LOC284683, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284683 BINDING SITE, designated SEQ ID:5926, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53052] Another function of GAM7776 is therefore inhibition of LOC284683 (Accession XP_208236.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284683.

[53053] LOC284701 (Accession XP_294994.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284701 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC284701, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284701 BINDING SITE, designated SEQ ID:12803, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also design-

nated SEQ ID:246.

[53054] Another function of GAM7776 is therefore inhibition of LOC284701 (Accession XP_294994.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284701.

[53055] LOC284708 (Accession XP_209332.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284708 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284708, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284708 BINDING SITE, designated SEQ ID:5153, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53056] Another function of GAM7776 is therefore inhibition of LOC284708 (Accession XP_209332.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284708.

[53057] LOC284723 (Accession XP_211602.1) is another

GAM7776 target gene, herein designated TARGET GENE. LOC284723 BINDING SITE1 through LOC284723 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC284723, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284723 BINDING SITE1 through LOC284723 BINDING SITE3, designated SEQ ID:6498, SEQ ID:3182 and SEQ ID:2215 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53058] Another function of GAM7776 is therefore inhibition of LOC284723 (Accession XP_211602.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284723.

[53059] LOC284805 (Accession XP_209371.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284805 BINDING SITE1 through LOC284805 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC284805, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the com-

plementarity of the nucleotide sequences of LOC284805 BINDING SITE1 through LOC284805 BINDING SITE3, designated SEQ ID:8046, SEQ ID:1544 and SEQ ID:853 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53060] Another function of GAM7776 is therefore inhibition of LOC284805 (Accession XP_209371.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284805.

[53061] LOC284839 (Accession XP_211661.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284839 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC284839, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284839 BINDING SITE, designated SEQ ID:19401, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53062] Another function of GAM7776 is therefore inhibition of LOC284839 (Accession XP_211661.1) . Accordingly, utili-

ties of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284839.

[53063] LOC284853 (Accession XP_209383.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284853 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284853, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284853 BINDING SITE, designated SEQ ID:3582, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53064] Another function of GAM7776 is therefore inhibition of LOC284853 (Accession XP_209383.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284853.

[53065] LOC284856 (Accession XP_302835.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284856 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of

mRNA encoded by LOC284856, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284856 BINDING SITE, designated SEQ ID:12736, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53066] Another function of GAM7776 is therefore inhibition of LOC284856 (Accession XP_302835.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284856.

[53067] LOC284856 (Accession XP_211668.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC284856 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by LOC284856, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284856 BINDING SITE, designated SEQ ID:12736, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53068] Another function of GAM7776 is therefore inhibition of LOC284856 (Accession XP_211668.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284856.

[53069] LOC284859 (Accession XP_209384.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC284859 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284859, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284859 BINDING SITE, designated SEQ ID:16785, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53070] Another function of GAM7776 is therefore inhibition of LOC284859 (Accession XP_209384.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284859.

[53071] LOC284861 (Accession XP_211670.2) is another GAM7776 target gene, herein designated TARGET GENE.

LOC284861 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC284861, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284861 BINDING SITE, designated SEQ ID:16785, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53072] Another function of GAM7776 is therefore inhibition of LOC284861 (Accession XP_211670.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284861.

[53073] LOC284865 (Accession XP_211672.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284865 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284865, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284865 BINDING SITE, designated SEQ ID:1645, to the nucleotide sequence of

GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53074] Another function of GAM7776 is therefore inhibition of LOC284865 (Accession XP_211672.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284865.

[53075] LOC284873 (Accession XP_209412.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284873 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284873, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284873 BINDING SITE, designated SEQ ID:16785, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53076] Another function of GAM7776 is therefore inhibition of LOC284873 (Accession XP_209412.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284873.

[53077] LOC284874 (Accession XP_209394.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284874 BINDING SITE1 and LOC284874 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC284874, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284874 BINDING SITE1 and LOC284874 BINDING SITE2, designated SEQ ID:3846 and SEQ ID:16244 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53078] Another function of GAM7776 is therefore inhibition of LOC284874 (Accession XP_209394.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284874.

[53079] LOC284934 (Accession XP_211696.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284934 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC284934, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284934 BINDING SITE, designated SEQ ID:14894, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53080] Another function of GAM7776 is therefore inhibition of LOC284934 (Accession XP_211696.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284934.

[53081] LOC284947 (Accession XP_211705.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284947 BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by LOC284947, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284947 BINDING SITE, designated SEQ ID:5465, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53082] Another function of GAM7776 is therefore inhibition of LOC284947 (Accession XP_211705.1) . Accordingly, utili-

ties of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284947.

[53083] LOC284950 (Accession XP_211703.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC284950 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284950, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284950 BINDING SITE, designated SEQ ID:4025, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53084] Another function of GAM7776 is therefore inhibition of LOC284950 (Accession XP_211703.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284950.

[53085] LOC285002 (Accession XP_211731.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC285002 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by

LOC285002, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285002 BINDING SITE, designated SEQ ID:3500, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53086] Another function of GAM7776 is therefore inhibition of LOC285002 (Accession XP_211731.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285002.

[53087] LOC285026 (Accession XP_209440.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC285026 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285026, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285026 BINDING SITE, designated SEQ ID:17523, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53088] Another function of GAM7776 is therefore inhibition of LOC285026 (Accession XP_209440.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285026.

[53089] LOC285052 (Accession XP_211751.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC285052 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285052, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285052 BINDING SITE, designated SEQ ID:2174, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53090] Another function of GAM7776 is therefore inhibition of LOC285052 (Accession XP_211751.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285052.

[53091] LOC285058 (Accession XP_211753.1) is another GAM7776 target gene, herein designated TARGET GENE.

LOC285058 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC285058, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285058 BINDING SITE, designated SEQ ID:20023, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53092] Another function of GAM7776 is therefore inhibition of LOC285058 (Accession XP_211753.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285058.

[53093] LOC285083 (Accession XP_209464.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC285083 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285083, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285083 BINDING SITE, designated SEQ ID:5667, to the nucleotide sequence of

GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53094] Another function of GAM7776 is therefore inhibition of LOC285083 (Accession XP_209464.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285083.

[53095] LOC285088 (Accession XP_209465.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC285088 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285088, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285088 BINDING SITE, designated SEQ ID:6092, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53096] Another function of GAM7776 is therefore inhibition of LOC285088 (Accession XP_209465.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285088.

[53097] LOC285123 (Accession XP_211773.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC285123 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285123, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285123 BINDING SITE, designated SEQ ID:17113, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53098] Another function of GAM7776 is therefore inhibition of LOC285123 (Accession XP_211773.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285123.

[53099] LOC285127 (Accession XP_211771.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC285127 BINDING SITE1 and LOC285127 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC285127, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the com-

plementarity of the nucleotide sequences of LOC285127 BINDING SITE1 and LOC285127 BINDING SITE2, designated SEQ ID:11528 and SEQ ID:5921 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53100] Another function of GAM7776 is therefore inhibition of LOC285127 (Accession XP_211771.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285127.

[53101] LOC285166 (Accession XP_211791.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC285166 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285166, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285166 BINDING SITE, designated SEQ ID:4283, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53102] Another function of GAM7776 is therefore inhibition of LOC285166 (Accession XP_211791.1) . Accordingly, utili-

ties of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285166.

[53103] LOC285176 (Accession XP_209500.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC285176 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285176, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285176 BINDING SITE, designated SEQ ID:7860, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53104] Another function of GAM7776 is therefore inhibition of LOC285176 (Accession XP_209500.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285176.

[53105] LOC285193 (Accession XP_209509.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC285193 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by

LOC285193, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285193 BINDING SITE, designated SEQ ID:1745, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53106] Another function of GAM7776 is therefore inhibition of LOC285193 (Accession XP_209509.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285193.

[53107] LOC285221 (Accession XP_209521.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC285221 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC285221, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285221 BINDING SITE, designated SEQ ID:13597, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53108] Another function of GAM7776 is therefore inhibition of LOC285221 (Accession XP_209521.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285221.

[53109] LOC285231 (Accession XP_211813.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC285231 BINDING SITE1 through LOC285231 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC285231, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285231 BINDING SITE1 through LOC285231 BINDING SITE3, designated SEQ ID:8001, SEQ ID:15366 and SEQ ID:8001 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53110] Another function of GAM7776 is therefore inhibition of LOC285231 (Accession XP_211813.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285231.

[53111] LOC285231 (Accession XP_211813.1) is another

GAM7776 target gene, herein designated TARGET GENE. LOC285231 BINDING SITE1 through LOC285231 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC285231, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285231 BINDING SITE1 through LOC285231 BINDING SITE3, designated SEQ ID:9352, SEQ ID:15575 and SEQ ID:9374 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53112] Another function of GAM7776 is therefore inhibition of LOC285231 (Accession XP_211813.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285231.

[53113] LOC285334 (Accession XP_211844.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC285334 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285334, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC285334 BINDING SITE, designated SEQ ID:1027, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53114] Another function of GAM7776 is therefore inhibition of LOC285334 (Accession XP_211844.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285334.

[53115] LOC285345 (Accession XP_211854.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC285345 BINDING SITE1 and LOC285345 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC285345, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285345 BINDING SITE1 and LOC285345 BINDING SITE2, designated SEQ ID:18883 and SEQ ID:556 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53116] Another function of GAM7776 is therefore inhibition of LOC285345 (Accession XP_211854.1) . Accordingly, utili-

ties of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285345.

[53117] LOC285366 (Accession XP_209581.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC285366 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285366, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285366 BINDING SITE, designated SEQ ID:6117, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53118] Another function of GAM7776 is therefore inhibition of LOC285366 (Accession XP_209581.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285366.

[53119] LOC285369 (Accession XP_211861.3) is another GAM7776 target gene, herein designated TARGET GENE. LOC285369 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by

LOC285369, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285369 BINDING SITE, designated SEQ ID:10352, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53120] Another function of GAM7776 is therefore inhibition of LOC285369 (Accession XP_211861.3) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285369.

[53121] LOC285389 (Accession XP_211873.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC285389 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285389, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285389 BINDING SITE, designated SEQ ID:19692, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53122] Another function of GAM7776 is therefore inhibition of LOC285389 (Accession XP_211873.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285389.

[53123] LOC285392 (Accession XP_211879.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC285392 BINDING SITE1 and LOC285392 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC285392, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285392 BINDING SITE1 and LOC285392 BINDING SITE2, designated SEQ ID:9688 and SEQ ID:17969 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53124] Another function of GAM7776 is therefore inhibition of LOC285392 (Accession XP_211879.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285392.

[53125] LOC285398 (Accession XP_209593.1) is another

GAM7776 target gene, herein designated TARGET GENE. LOC285398 BINDING SITE1 and LOC285398 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC285398, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285398 BINDING SITE1 and LOC285398 BINDING SITE2, designated SEQ ID:13286 and SEQ ID:4655 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53126] Another function of GAM7776 is therefore inhibition of LOC285398 (Accession XP_209593.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285398.

[53127] LOC285429 (Accession XP_209607.3) is another GAM7776 target gene, herein designated TARGET GENE. LOC285429 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285429, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC285429 BINDING SITE, designated SEQ ID:4171, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53128] Another function of GAM7776 is therefore inhibition of LOC285429 (Accession XP_209607.3) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285429.

[53129] LOC285488 (Accession XP_211914.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC285488 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC285488, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285488 BINDING SITE, designated SEQ ID:13804, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53130] Another function of GAM7776 is therefore inhibition of LOC285488 (Accession XP_211914.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC285488.

[53131] LOC285491 (Accession XP_211917.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC285491 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285491, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285491 BINDING SITE, designated SEQ ID:11239, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53132] Another function of GAM7776 is therefore inhibition of LOC285491 (Accession XP_211917.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285491.

[53133] LOC285509 (Accession XP_211923.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC285509 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC285509, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285509 BINDING SITE, designated SEQ ID:3519, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53134] Another function of GAM7776 is therefore inhibition of LOC285509 (Accession XP_211923.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285509.

[53135] LOC285510 (Accession XP_209643.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC285510 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285510, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285510 BINDING SITE, designated SEQ ID:14552, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53136] Another function of GAM7776 is therefore inhibition of

LOC285510 (Accession XP_209643.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285510.

[53137] LOC285540 (Accession XP_209654.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC285540 BINDING SITE1 and LOC285540 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC285540, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285540 BINDING SITE1 and LOC285540 BINDING SITE2, designated SEQ ID:9543 and SEQ ID:6961 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53138] Another function of GAM7776 is therefore inhibition of LOC285540 (Accession XP_209654.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285540.

[53139] LOC285560 (Accession XP_209660.1) is another GAM7776 target gene, herein designated TARGET GENE.

LOC285560 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285560, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285560 BINDING SITE, designated SEQ ID:8718, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53140] Another function of GAM7776 is therefore inhibition of LOC285560 (Accession XP_209660.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285560.

[53141] LOC285589 (Accession XP_209671.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC285589 BINDING SITE1 and LOC285589 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC285589, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285589 BINDING SITE1 and LOC285589 BINDING SITE2, design-

nated SEQ ID:17087 and SEQ ID:12804 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53142] Another function of GAM7776 is therefore inhibition of LOC285589 (Accession XP_209671.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285589.

[53143] LOC285626 (Accession XP_211959.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC285626 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC285626, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285626 BINDING SITE, designated SEQ ID:13843, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53144] Another function of GAM7776 is therefore inhibition of LOC285626 (Accession XP_211959.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC285626.

[53145] LOC285638 (Accession XP_209693.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC285638 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC285638, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285638 BINDING SITE, designated SEQ ID:4949, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53146] Another function of GAM7776 is therefore inhibition of LOC285638 (Accession XP_209693.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285638.

[53147] LOC285679 (Accession XP_209719.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC285679 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285679, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285679 BINDING SITE, designated SEQ ID:19299, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53148] Another function of GAM7776 is therefore inhibition of LOC285679 (Accession XP_209719.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285679.

[53149] LOC285689 (Accession XP_209724.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC285689 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285689, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285689 BINDING SITE, designated SEQ ID:17726, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53150] Another function of GAM7776 is therefore inhibition of LOC285689 (Accession XP_209724.1) . Accordingly, utili-

ties of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285689.

[53151] LOC285693 (Accession XP_211981.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC285693 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC285693, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285693 BINDING SITE, designated SEQ ID:16940, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53152] Another function of GAM7776 is therefore inhibition of LOC285693 (Accession XP_211981.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285693.

[53153] LOC285722 (Accession XP_211997.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC285722 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by

LOC285722, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285722 BINDING SITE, designated SEQ ID:18012, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53154] Another function of GAM7776 is therefore inhibition of LOC285722 (Accession XP_211997.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285722.

[53155] LOC285744 (Accession XP_209743.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC285744 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285744, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285744 BINDING SITE, designated SEQ ID:11141, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53156] Another function of GAM7776 is therefore inhibition of LOC285744 (Accession XP_209743.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285744.

[53157] LOC285747 (Accession XP_209742.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC285747 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285747, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285747 BINDING SITE, designated SEQ ID:11528, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53158] Another function of GAM7776 is therefore inhibition of LOC285747 (Accession XP_209742.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285747.

[53159] LOC285760 (Accession XP_209750.1) is another GAM7776 target gene, herein designated TARGET GENE.

LOC285760 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285760, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285760 BINDING SITE, designated SEQ ID:13412, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53160] Another function of GAM7776 is therefore inhibition of LOC285760 (Accession XP_209750.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285760.

[53161] LOC285777 (Accession XP_212013.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC285777 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC285777, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285777 BINDING SITE, designated SEQ ID:16810, to the nucleotide sequence of

GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53162] Another function of GAM7776 is therefore inhibition of LOC285777 (Accession XP_212013.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285777.

[53163] LOC285812 (Accession XP_212055.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC285812 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285812, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285812 BINDING SITE, designated SEQ ID:559, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53164] Another function of GAM7776 is therefore inhibition of LOC285812 (Accession XP_212055.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285812.

[53165] LOC285813 (Accession XP_212036.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC285813 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC285813, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285813 BINDING SITE, designated SEQ ID:12389, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53166] Another function of GAM7776 is therefore inhibition of LOC285813 (Accession XP_212036.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285813.

[53167] LOC285822 (Accession XP_209777.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC285822 BINDING SITE1 and LOC285822 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC285822, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the com-

plementarity of the nucleotide sequences of LOC285822 BINDING SITE1 and LOC285822 BINDING SITE2, designated SEQ ID:1847 and SEQ ID:9753 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53168] Another function of GAM7776 is therefore inhibition of LOC285822 (Accession XP_209777.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285822.

[53169] LOC285830 (Accession XP_212043.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC285830 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC285830, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285830 BINDING SITE, designated SEQ ID:986, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53170] Another function of GAM7776 is therefore inhibition of LOC285830 (Accession XP_212043.1) . Accordingly, utili-

ties of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285830.

[53171] LOC285843 (Accession XP_212034.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC285843 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285843, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285843 BINDING SITE, designated SEQ ID:17964, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53172] Another function of GAM7776 is therefore inhibition of LOC285843 (Accession XP_212034.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285843.

[53173] LOC285847 (Accession XP_212045.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC285847 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by

LOC285847, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285847 BINDING SITE, designated SEQ ID:18945, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53174] Another function of GAM7776 is therefore inhibition of LOC285847 (Accession XP_212045.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285847.

[53175] LOC285872 (Accession XP_212061.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC285872 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285872, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285872 BINDING SITE, designated SEQ ID:10885, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53176] Another function of GAM7776 is therefore inhibition of LOC285872 (Accession XP_212061.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285872.

[53177] LOC285914 (Accession XP_209810.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC285914 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285914, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285914 BINDING SITE, designated SEQ ID:6188, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53178] Another function of GAM7776 is therefore inhibition of LOC285914 (Accession XP_209810.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285914.

[53179] LOC285923 (Accession XP_212104.1) is another GAM7776 target gene, herein designated TARGET GENE.

LOC285923 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285923, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285923 BINDING SITE, designated SEQ ID:19536, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53180] Another function of GAM7776 is therefore inhibition of LOC285923 (Accession XP_212104.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285923.

[53181] LOC285924 (Accession XP_209816.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC285924 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285924, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285924 BINDING SITE, designated SEQ ID:17126, to the nucleotide sequence of

GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53182] Another function of GAM7776 is therefore inhibition of LOC285924 (Accession XP_209816.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285924.

[53183] LOC285945 (Accession XP_212092.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC285945 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC285945, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285945 BINDING SITE, designated SEQ ID:12075, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53184] Another function of GAM7776 is therefore inhibition of LOC285945 (Accession XP_212092.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285945.

[53185] LOC285952 (Accession XP_209821.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC285952 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285952, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285952 BINDING SITE, designated SEQ ID:15323, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53186] Another function of GAM7776 is therefore inhibition of LOC285952 (Accession XP_209821.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285952.

[53187] LOC285961 (Accession XP_209833.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC285961 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC285961, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC285961 BINDING SITE, designated SEQ ID:2604, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53188] Another function of GAM7776 is therefore inhibition of LOC285961 (Accession XP_209833.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285961.

[53189] LOC285972 (Accession XP_212105.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC285972 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285972, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285972 BINDING SITE, designated SEQ ID:5318, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53190] Another function of GAM7776 is therefore inhibition of LOC285972 (Accession XP_212105.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC285972.

[53191] LOC285979 (Accession XP_212117.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC285979 BINDING SITE1 and LOC285979 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC285979, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285979 BINDING SITE1 and LOC285979 BINDING SITE2, designated SEQ ID:6388 and SEQ ID:1397 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53192] Another function of GAM7776 is therefore inhibition of LOC285979 (Accession XP_212117.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285979.

[53193] LOC285989 (Accession XP_212111.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC285989 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by

LOC285989, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285989 BINDING SITE, designated SEQ ID:11742, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53194] Another function of GAM7776 is therefore inhibition of LOC285989 (Accession XP_212111.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285989.

[53195] LOC285999 (Accession XP_212120.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC285999 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285999, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285999 BINDING SITE, designated SEQ ID:3647, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53196] Another function of GAM7776 is therefore inhibition of LOC285999 (Accession XP_212120.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285999.

[53197] LOC286029 (Accession XP_209866.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC286029 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286029, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286029 BINDING SITE, designated SEQ ID:15231, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53198] Another function of GAM7776 is therefore inhibition of LOC286029 (Accession XP_209866.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286029.

[53199] LOC286030 (Accession XP_209868.1) is another GAM7776 target gene, herein designated TARGET GENE.

LOC286030 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC286030, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286030 BINDING SITE, designated SEQ ID:2244, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53200] Another function of GAM7776 is therefore inhibition of LOC286030 (Accession XP_209868.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286030.

[53201] LOC286039 (Accession XP_209873.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC286039 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC286039, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286039 BINDING SITE, designated SEQ ID:11035, to the nucleotide sequence of

GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53202] Another function of GAM7776 is therefore inhibition of LOC286039 (Accession XP_209873.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286039.

[53203] LOC286052 (Accession XP_212152.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC286052 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286052, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286052 BINDING SITE, designated SEQ ID:9367, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53204] Another function of GAM7776 is therefore inhibition of LOC286052 (Accession XP_212152.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286052.

[53205] LOC286075 (Accession NP_776192.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC286075 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC286075, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286075 BINDING SITE, designated SEQ ID:17965, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53206] Another function of GAM7776 is therefore inhibition of LOC286075 (Accession NP_776192.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286075.

[53207] LOC286078 (Accession XP_212163.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC286078 BINDING SITE1 through LOC286078 BINDING SITE5 are target binding sites found in untranslated regions of mRNA encoded by LOC286078, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the com-

plementarity of the nucleotide sequences of LOC286078 BINDING SITE1 through LOC286078 BINDING SITE5, designated SEQ ID:16716, SEQ ID:15083, SEQ ID:3810, SEQ ID:13100 and SEQ ID:15589 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53208] Another function of GAM7776 is therefore inhibition of LOC286078 (Accession XP_212163.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286078.

[53209] LOC286090 (Accession XP_212166.3) is another GAM7776 target gene, herein designated TARGET GENE. LOC286090 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC286090, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286090 BINDING SITE, designated SEQ ID:16409, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53210] Another function of GAM7776 is therefore inhibition of

LOC286090 (Accession XP_212166.3) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286090.

[53211] LOC286126 (Accession XP_212185.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC286126 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286126, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286126 BINDING SITE, designated SEQ ID:7847, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53212] Another function of GAM7776 is therefore inhibition of LOC286126 (Accession XP_212185.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286126.

[53213] LOC286132 (Accession XP_212194.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC286132 BINDING SITE is a target binding site found in

the 5' untranslated region of mRNA encoded by LOC286132, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286132 BINDING SITE, designated SEQ ID:7113, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53214] Another function of GAM7776 is therefore inhibition of LOC286132 (Accession XP_212194.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286132.

[53215] LOC286135 (Accession XP_212196.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC286135 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286135, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286135 BINDING SITE, designated SEQ ID:9746, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also design-

nated SEQ ID:246.

[53216] Another function of GAM7776 is therefore inhibition of LOC286135 (Accession XP_212196.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286135.

[53217] LOC286166 (Accession XP_209925.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC286166 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC286166, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286166 BINDING SITE, designated SEQ ID:3927, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53218] Another function of GAM7776 is therefore inhibition of LOC286166 (Accession XP_209925.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286166.

[53219] LOC286170 (Accession XP_212211.1) is another

GAM7776 target gene, herein designated TARGET GENE. LOC286170 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC286170, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286170 BINDING SITE, designated SEQ ID:8426, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53220] Another function of GAM7776 is therefore inhibition of LOC286170 (Accession XP_212211.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286170.

[53221] LOC286186 (Accession XP_212219.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC286186 BINDING SITE1 and LOC286186 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC286186, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286186

BINDING SITE1 and LOC286186 BINDING SITE2, designated SEQ ID:3430 and SEQ ID:18020 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53222] Another function of GAM7776 is therefore inhibition of LOC286186 (Accession XP_212219.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286186.

[53223] LOC286206 (Accession XP_209953.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC286206 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286206, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286206 BINDING SITE, designated SEQ ID:2600, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53224] Another function of GAM7776 is therefore inhibition of LOC286206 (Accession XP_209953.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC286206.

[53225] LOC286207 (Accession XP_209941.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC286207 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286207, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286207 BINDING SITE, designated SEQ ID:19893, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53226] Another function of GAM7776 is therefore inhibition of LOC286207 (Accession XP_209941.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286207.

[53227] LOC286208 (Accession XP_212230.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC286208 BINDING SITE1 through LOC286208 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC286208, corresponding to

target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286208 BINDING SITE1 through LOC286208 BINDING SITE3, designated SEQ ID:4372, SEQ ID:9724 and SEQ ID:2849 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53228] Another function of GAM7776 is therefore inhibition of LOC286208 (Accession XP_212230.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286208.

[53229] LOC286215 (Accession XP_212228.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC286215 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC286215, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286215 BINDING SITE, designated SEQ ID:19240, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53230] Another function of GAM7776 is therefore inhibition of LOC286215 (Accession XP_212228.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286215.

[53231] LOC286221 (Accession XP_212233.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC286221 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC286221, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286221 BINDING SITE, designated SEQ ID:7774, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53232] Another function of GAM7776 is therefore inhibition of LOC286221 (Accession XP_212233.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286221.

[53233] LOC286223 (Accession XP_209956.1) is another GAM7776 target gene, herein designated TARGET GENE.

LOC286223 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286223, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286223 BINDING SITE, designated SEQ ID:6118, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53234] Another function of GAM7776 is therefore inhibition of LOC286223 (Accession XP_209956.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286223.

[53235] LOC286245 (Accession XP_212244.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC286245 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC286245, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286245 BINDING SITE, designated SEQ ID:6868, to the nucleotide sequence of

GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53236] Another function of GAM7776 is therefore inhibition of LOC286245 (Accession XP_212244.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286245.

[53237] LOC286341 (Accession XP_212278.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC286341 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286341, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286341 BINDING SITE, designated SEQ ID:15975, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53238] Another function of GAM7776 is therefore inhibition of LOC286341 (Accession XP_212278.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286341.

[53239] LOC286347 (Accession XP_208408.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC286347 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC286347, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286347 BINDING SITE, designated SEQ ID:522, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53240] Another function of GAM7776 is therefore inhibition of LOC286347 (Accession XP_208408.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286347.

[53241] LOC286354 (Accession XP_212286.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC286354 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC286354, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC286354 BINDING SITE, designated SEQ ID:15730, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53242] Another function of GAM7776 is therefore inhibition of LOC286354 (Accession XP_212286.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286354.

[53243] LOC286356 (Accession XP_212290.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC286356 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC286356, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286356 BINDING SITE, designated SEQ ID:7385, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53244] Another function of GAM7776 is therefore inhibition of LOC286356 (Accession XP_212290.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC286356.

[53245] LOC286357 (Accession XP_212285.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC286357 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC286357, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286357 BINDING SITE, designated SEQ ID:14974, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53246] Another function of GAM7776 is therefore inhibition of LOC286357 (Accession XP_212285.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286357.

[53247] LOC286371 (Accession XP_212291.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC286371 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286371, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286371 BINDING SITE, designated SEQ ID:3785, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53248] Another function of GAM7776 is therefore inhibition of LOC286371 (Accession XP_212291.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286371.

[53249] LOC286395 (Accession XP_212308.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC286395 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC286395, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286395 BINDING SITE, designated SEQ ID:2722, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53250] Another function of GAM7776 is therefore inhibition of

LOC286395 (Accession XP_212308.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286395.

[53251] LOC286401 (Accession XP_212310.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC286401 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC286401, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286401 BINDING SITE, designated SEQ ID:1038, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53252] Another function of GAM7776 is therefore inhibition of LOC286401 (Accession XP_212310.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286401.

[53253] LOC286441 (Accession XP_212319.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC286441 BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by LOC286441, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286441 BINDING SITE, designated SEQ ID:2754, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53254] Another function of GAM7776 is therefore inhibition of LOC286441 (Accession XP_212319.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286441.

[53255] LOC286467 (Accession XP_210063.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC286467 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286467, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286467 BINDING SITE, designated SEQ ID:9580, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also design-

nated SEQ ID:246.

[53256] Another function of GAM7776 is therefore inhibition of LOC286467 (Accession XP_210063.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286467.

[53257] LOC286553 (Accession XP_212340.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC286553 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286553, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286553 BINDING SITE, designated SEQ ID:3183, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53258] Another function of GAM7776 is therefore inhibition of LOC286553 (Accession XP_212340.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286553.

[53259] LOC286558 (Accession XP_210106.1) is another

GAM7776 target gene, herein designated TARGET GENE. LOC286558 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286558, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286558 BINDING SITE, designated SEQ ID:9264, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53260] Another function of GAM7776 is therefore inhibition of LOC286558 (Accession XP_210106.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286558.

[53261] LOC286564 (Accession XP_210108.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC286564 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286564, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286564 BINDING SITE, design-

nated SEQ ID:9264, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53262] Another function of GAM7776 is therefore inhibition of LOC286564 (Accession XP_210108.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286564.

[53263] LOC338562 (Accession XP_294654.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC338562 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC338562, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338562 BINDING SITE, designated SEQ ID:13760, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53264] Another function of GAM7776 is therefore inhibition of LOC338562 (Accession XP_294654.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC338562.

[53265] LOC338565 (Accession XP_294653.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC338565 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC338565, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338565 BINDING SITE, designated SEQ ID:12867, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53266] Another function of GAM7776 is therefore inhibition of LOC338565 (Accession XP_294653.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC338565.

[53267] LOC338575 (Accession XP_290473.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC338575 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC338575, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338575 BINDING SITE, designated SEQ ID:14074, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53268] Another function of GAM7776 is therefore inhibition of LOC338575 (Accession XP_290473.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC338575.

[53269] LOC338579 (Accession XP_290472.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC338579 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC338579, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338579 BINDING SITE, designated SEQ ID:4528, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53270] Another function of GAM7776 is therefore inhibition of LOC338579 (Accession XP_290472.1) . Accordingly, utili-

ties of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC338579.

[53271] LOC338585 (Accession XP_294658.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC338585 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC338585, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338585 BINDING SITE, designated SEQ ID:7523, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53272] Another function of GAM7776 is therefore inhibition of LOC338585 (Accession XP_294658.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC338585.

[53273] LOC338645 (Accession XP_290494.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC338645 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by

LOC338645, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338645 BINDING SITE, designated SEQ ID:6626, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53274] Another function of GAM7776 is therefore inhibition of LOC338645 (Accession XP_290494.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC338645.

[53275] LOC338709 (Accession XP_211595.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC338709 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC338709, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338709 BINDING SITE, designated SEQ ID:12803, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53276] Another function of GAM7776 is therefore inhibition of LOC338709 (Accession XP_211595.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC338709.

[53277] LOC338731 (Accession XP_294688.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC338731 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC338731, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338731 BINDING SITE, designated SEQ ID:6518, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53278] Another function of GAM7776 is therefore inhibition of LOC338731 (Accession XP_294688.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC338731.

[53279] LOC338739 (Accession XP_294690.1) is another GAM7776 target gene, herein designated TARGET GENE.

LOC338739 BINDING SITE1 and LOC338739 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC338739, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338739 BINDING SITE1 and LOC338739 BINDING SITE2, designated SEQ ID:15044 and SEQ ID:14732 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53280] Another function of GAM7776 is therefore inhibition of LOC338739 (Accession XP_294690.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC338739.

[53281] LOC338773 (Accession XP_290570.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC338773 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC338773, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338773 BINDING SITE, design-

nated SEQ ID:16493, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53282] Another function of GAM7776 is therefore inhibition of LOC338773 (Accession XP_290570.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC338773.

[53283] LOC338819 (Accession XP_290216.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC338819 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC338819, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338819 BINDING SITE, designated SEQ ID:11507, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53284] Another function of GAM7776 is therefore inhibition of LOC338819 (Accession XP_290216.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC338819.

[53285] LOC338899 (Accession XP_294740.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC338899 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC338899, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338899 BINDING SITE, designated SEQ ID:12341, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53286] Another function of GAM7776 is therefore inhibition of LOC338899 (Accession XP_294740.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC338899.

[53287] LOC338923 (Accession XP_294742.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC338923 BINDING SITE1 and LOC338923 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC338923, corresponding to target binding sites such as BINDING SITE I, BINDING SITE

II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338923 BINDING SITE1 and LOC338923 BINDING SITE2, designated SEQ ID:8559 and SEQ ID:4298 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53288] Another function of GAM7776 is therefore inhibition of LOC338923 (Accession XP_294742.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC338923.

[53289] LOC338963 (Accession XP_294757.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC338963 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC338963, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338963 BINDING SITE, designated SEQ ID:3348, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53290] Another function of GAM7776 is therefore inhibition of

LOC338963 (Accession XP_294757.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC338963.

[53291] LOC338991 (Accession XP_290663.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC338991 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC338991, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338991 BINDING SITE, designated SEQ ID:12479, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53292] Another function of GAM7776 is therefore inhibition of LOC338991 (Accession XP_290663.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC338991.

[53293] LOC338999 (Accession XP_290659.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC338999 BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by LOC338999, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338999 BINDING SITE, designated SEQ ID:12479, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53294] Another function of GAM7776 is therefore inhibition of LOC338999 (Accession XP_290659.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC338999.

[53295] LOC339077 (Accession XP_294802.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC339077 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339077, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339077 BINDING SITE, designated SEQ ID:17484, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also design-

nated SEQ ID:246.

[53296] Another function of GAM7776 is therefore inhibition of LOC339077 (Accession XP_294802.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339077.

[53297] LOC339078 (Accession XP_290692.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC339078 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339078, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339078 BINDING SITE, designated SEQ ID:9543, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53298] Another function of GAM7776 is therefore inhibition of LOC339078 (Accession XP_290692.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339078.

[53299] LOC339083 (Accession XP_290697.2) is another

GAM7776 target gene, herein designated TARGET GENE. LOC339083 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC339083, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339083 BINDING SITE, designated SEQ ID:1843, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53300] Another function of GAM7776 is therefore inhibition of LOC339083 (Accession XP_290697.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339083.

[53301] LOC339108 (Accession XP_290711.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC339108 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC339108, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339108 BINDING SITE, design-

nated SEQ ID:14266, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53302] Another function of GAM7776 is therefore inhibition of LOC339108 (Accession XP_290711.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339108.

[53303] LOC339146 (Accession XP_294825.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC339146 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC339146, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339146 BINDING SITE, designated SEQ ID:15614, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53304] Another function of GAM7776 is therefore inhibition of LOC339146 (Accession XP_294825.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC339146.

[53305] LOC339178 (Accession XP_290742.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC339178 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339178, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339178 BINDING SITE, designated SEQ ID:16261, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53306] Another function of GAM7776 is therefore inhibition of LOC339178 (Accession XP_290742.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339178.

[53307] LOC339201 (Accession XP_290756.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC339201 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339201, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339201 BINDING SITE, designated SEQ ID:4056, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53308] Another function of GAM7776 is therefore inhibition of LOC339201 (Accession XP_290756.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339201.

[53309] LOC339216 (Accession XP_290762.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC339216 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC339216, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339216 BINDING SITE, designated SEQ ID:19537, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53310] Another function of GAM7776 is therefore inhibition of LOC339216 (Accession XP_290762.2) . Accordingly, utili-

ties of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339216.

[53311] LOC339248 (Accession XP_294879.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC339248 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339248, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339248 BINDING SITE, designated SEQ ID:19597, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53312] Another function of GAM7776 is therefore inhibition of LOC339248 (Accession XP_294879.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339248.

[53313] LOC339250 (Accession XP_294883.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC339250 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by

LOC339250, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339250 BINDING SITE, designated SEQ ID:19597, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53314] Another function of GAM7776 is therefore inhibition of LOC339250 (Accession XP_294883.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339250.

[53315] LOC339282 (Accession XP_294900.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC339282 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC339282, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339282 BINDING SITE, designated SEQ ID:19537, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53316] Another function of GAM7776 is therefore inhibition of LOC339282 (Accession XP_294900.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339282.

[53317] LOC339283 (Accession XP_294899.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC339283 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC339283, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339283 BINDING SITE, designated SEQ ID:11314, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53318] Another function of GAM7776 is therefore inhibition of LOC339283 (Accession XP_294899.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339283.

[53319] LOC339324 (Accession XP_290838.1) is another GAM7776 target gene, herein designated TARGET GENE.

LOC339324 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339324, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339324 BINDING SITE, designated SEQ ID:9544, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53320] Another function of GAM7776 is therefore inhibition of LOC339324 (Accession XP_290838.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339324.

[53321] LOC339325 (Accession XP_290830.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC339325 BINDING SITE1 and LOC339325 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC339325, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339325 BINDING SITE1 and LOC339325 BINDING SITE2, design-

nated SEQ ID:17114 and SEQ ID:16940 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53322] Another function of GAM7776 is therefore inhibition of LOC339325 (Accession XP_290830.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339325.

[53323] LOC339417 (Accession XP_294944.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC339417 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC339417, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339417 BINDING SITE, designated SEQ ID:2027, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53324] Another function of GAM7776 is therefore inhibition of LOC339417 (Accession XP_294944.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC339417.

[53325] LOC339448 (Accession XP_290902.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC339448 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339448, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339448 BINDING SITE, designated SEQ ID:10679, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53326] Another function of GAM7776 is therefore inhibition of LOC339448 (Accession XP_290902.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339448.

[53327] LOC339458 (Accession XP_290911.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC339458 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339458, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339458 BINDING SITE, designated SEQ ID:5488, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53328] Another function of GAM7776 is therefore inhibition of LOC339458 (Accession XP_290911.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339458.

[53329] LOC339459 (Accession XP_290907.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC339459 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339459, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339459 BINDING SITE, designated SEQ ID:13513, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53330] Another function of GAM7776 is therefore inhibition of LOC339459 (Accession XP_290907.2) . Accordingly, utili-

ties of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339459.

[53331] LOC339492 (Accession XP_290919.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC339492 BINDING SITE1 through LOC339492 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC339492, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339492 BINDING SITE1 through LOC339492 BINDING SITE3, designated SEQ ID:7386, SEQ ID:8590 and SEQ ID:695 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53332] Another function of GAM7776 is therefore inhibition of LOC339492 (Accession XP_290919.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339492.

[53333] LOC339577 (Accession XP_295005.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC339577 BINDING SITE1 and LOC339577 BINDING

SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC339577, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339577 BINDING SITE1 and LOC339577 BINDING SITE2, designated SEQ ID:14733 and SEQ ID:12075 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53334] Another function of GAM7776 is therefore inhibition of LOC339577 (Accession XP_295005.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339577.

[53335] LOC339600 (Accession XP_295014.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC339600 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339600, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339600 BINDING SITE, designated SEQ ID:15295, to the nucleotide sequence of

GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53336] Another function of GAM7776 is therefore inhibition of LOC339600 (Accession XP_295014.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339600.

[53337] LOC339659 (Accession XP_290981.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC339659 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339659, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339659 BINDING SITE, designated SEQ ID:17076, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53338] Another function of GAM7776 is therefore inhibition of LOC339659 (Accession XP_290981.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339659.

[53339] LOC339685 (Accession XP_295032.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC339685 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC339685, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339685 BINDING SITE, designated SEQ ID:1982, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53340] Another function of GAM7776 is therefore inhibition of LOC339685 (Accession XP_295032.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339685.

[53341] LOC339694 (Accession XP_295035.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC339694 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC339694, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC339694 BINDING SITE, designated SEQ ID:15954, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53342] Another function of GAM7776 is therefore inhibition of LOC339694 (Accession XP_295035.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339694.

[53343] LOC339711 (Accession XP_295038.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC339711 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339711, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339711 BINDING SITE, designated SEQ ID:11528, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53344] Another function of GAM7776 is therefore inhibition of LOC339711 (Accession XP_295038.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC339711.

[53345] LOC339720 (Accession XP_295041.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC339720 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC339720, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339720 BINDING SITE, designated SEQ ID:16942, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53346] Another function of GAM7776 is therefore inhibition of LOC339720 (Accession XP_295041.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339720.

[53347] LOC339803 (Accession XP_295072.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC339803 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339803, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339803 BINDING SITE, designated SEQ ID:13337, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53348] Another function of GAM7776 is therefore inhibition of LOC339803 (Accession XP_295072.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339803.

[53349] LOC339808 (Accession XP_295071.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC339808 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339808, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339808 BINDING SITE, designated SEQ ID:6146, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53350] Another function of GAM7776 is therefore inhibition of

LOC339808 (Accession XP_295071.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339808.

[53351] LOC339809 (Accession XP_291020.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC339809 BINDING SITE1 and LOC339809 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC339809, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339809 BINDING SITE1 and LOC339809 BINDING SITE2, designated SEQ ID:1744 and SEQ ID:17750 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53352] Another function of GAM7776 is therefore inhibition of LOC339809 (Accession XP_291020.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339809.

[53353] LOC339833 (Accession XP_291031.1) is another GAM7776 target gene, herein designated TARGET GENE.

LOC339833 BINDING SITE1 and LOC339833 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC339833, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339833 BINDING SITE1 and LOC339833 BINDING SITE2, designated SEQ ID:7633 and SEQ ID:10421 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53354] Another function of GAM7776 is therefore inhibition of LOC339833 (Accession XP_291031.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339833.

[53355] LOC339834 (Accession NP_835467.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC339834 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by LOC339834, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339834

BINDING SITE, designated SEQ ID:14645, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53356] Another function of GAM7776 is therefore inhibition of LOC339834 (Accession NP_835467.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339834.

[53357] LOC339834 (Accession XP_291033.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC339834 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by LOC339834, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339834 BINDING SITE, designated SEQ ID:14645, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53358] Another function of GAM7776 is therefore inhibition of LOC339834 (Accession XP_291033.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC339834.

[53359] LOC339872 (Accession XP_291050.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC339872 BINDING SITE1 through LOC339872 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC339872, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339872 BINDING SITE1 through LOC339872 BINDING SITE3, designated SEQ ID:9299, SEQ ID:4026 and SEQ ID:5858 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53360] Another function of GAM7776 is therefore inhibition of LOC339872 (Accession XP_291050.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339872.

[53361] LOC339894 (Accession XP_295095.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC339894 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC339894, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339894 BINDING SITE, designated SEQ ID:1081, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53362] Another function of GAM7776 is therefore inhibition of LOC339894 (Accession XP_295095.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339894.

[53363] LOC339907 (Accession XP_291065.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC339907 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339907, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339907 BINDING SITE, designated SEQ ID:3425, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53364] Another function of GAM7776 is therefore inhibition of

LOC339907 (Accession XP_291065.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339907.

[53365] LOC339909 (Accession XP_291069.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC339909 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC339909, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339909 BINDING SITE, designated SEQ ID:10709, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53366] Another function of GAM7776 is therefore inhibition of LOC339909 (Accession XP_291069.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339909.

[53367] LOC339914 (Accession XP_295099.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC339914 BINDING SITE is a target binding site found in

the 5' untranslated region of mRNA encoded by LOC339914, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339914 BINDING SITE, designated SEQ ID:714, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53368] Another function of GAM7776 is therefore inhibition of LOC339914 (Accession XP_295099.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339914.

[53369] LOC339970 (Accession XP_291095.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC339970 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339970, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339970 BINDING SITE, designated SEQ ID:16942, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also design-

nated SEQ ID:246.

[53370] Another function of GAM7776 is therefore inhibition of LOC339970 (Accession XP_291095.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339970.

[53371] LOC340037 (Accession XP_295137.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC340037 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC340037, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340037 BINDING SITE, designated SEQ ID:12244, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53372] Another function of GAM7776 is therefore inhibition of LOC340037 (Accession XP_295137.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340037.

[53373] LOC340125 (Accession XP_291150.1) is another

GAM7776 target gene, herein designated TARGET GENE. LOC340125 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC340125, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340125 BINDING SITE, designated SEQ ID:12803, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53374] Another function of GAM7776 is therefore inhibition of LOC340125 (Accession XP_291150.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340125.

[53375] LOC340138 (Accession XP_291153.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC340138 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC340138, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340138 BINDING SITE, design-

nated SEQ ID:11753, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53376] Another function of GAM7776 is therefore inhibition of LOC340138 (Accession XP_291153.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340138.

[53377] LOC340156 (Accession XP_291158.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC340156 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC340156, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340156 BINDING SITE, designated SEQ ID:10096, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53378] Another function of GAM7776 is therefore inhibition of LOC340156 (Accession XP_291158.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC340156.

[53379] LOC340227 (Accession XP_291203.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC340227 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC340227, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340227 BINDING SITE, designated SEQ ID:12803, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53380] Another function of GAM7776 is therefore inhibition of LOC340227 (Accession XP_291203.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340227.

[53381] LOC340238 (Accession XP_295188.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC340238 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC340238, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340238 BINDING SITE, designated SEQ ID:2179, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53382] Another function of GAM7776 is therefore inhibition of LOC340238 (Accession XP_295188.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340238.

[53383] LOC340259 (Accession XP_295190.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC340259 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC340259, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340259 BINDING SITE, designated SEQ ID:18147, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53384] Another function of GAM7776 is therefore inhibition of LOC340259 (Accession XP_295190.1) . Accordingly, utili-

ties of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340259.

[53385] LOC340290 (Accession XP_291214.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC340290 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC340290, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340290 BINDING SITE, designated SEQ ID:15740, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53386] Another function of GAM7776 is therefore inhibition of LOC340290 (Accession XP_291214.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340290.

[53387] LOC340390 (Accession XP_291269.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC340390 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by

LOC340390, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340390 BINDING SITE, designated SEQ ID:18868, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53388] Another function of GAM7776 is therefore inhibition of LOC340390 (Accession XP_291269.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340390.

[53389] LOC340408 (Accession XP_291274.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC340408 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC340408, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340408 BINDING SITE, designated SEQ ID:1309, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53390] Another function of GAM7776 is therefore inhibition of LOC340408 (Accession XP_291274.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340408.

[53391] LOC340414 (Accession XP_295240.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC340414 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC340414, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340414 BINDING SITE, designated SEQ ID:1744, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53392] Another function of GAM7776 is therefore inhibition of LOC340414 (Accession XP_295240.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340414.

[53393] LOC340450 (Accession XP_295252.1) is another GAM7776 target gene, herein designated TARGET GENE.

LOC340450 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC340450, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340450 BINDING SITE, designated SEQ ID:1744, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53394] Another function of GAM7776 is therefore inhibition of LOC340450 (Accession XP_295252.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340450.

[53395] LOC340528 (Accession XP_295268.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC340528 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC340528, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340528 BINDING SITE, designated SEQ ID:13053, to the nucleotide sequence of

GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53396] Another function of GAM7776 is therefore inhibition of LOC340528 (Accession XP_295268.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340528.

[53397] LOC342926 (Accession XP_292790.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC342926 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC342926, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC342926 BINDING SITE, designated SEQ ID:13464, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53398] Another function of GAM7776 is therefore inhibition of LOC342926 (Accession XP_292790.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC342926.

[53399] LOC343435 (Accession XP_295563.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC343435 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC343435, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC343435 BINDING SITE, designated SEQ ID:439, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53400] Another function of GAM7776 is therefore inhibition of LOC343435 (Accession XP_295563.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC343435.

[53401] LOC345275 (Accession NP_835236.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC345275 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by LOC345275, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the comple-

mentarity of the nucleotide sequences of LOC345275 BINDING SITE, designated SEQ ID:523, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53402] Another function of GAM7776 is therefore inhibition of LOC345275 (Accession NP_835236.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC345275.

[53403] LOC345878 (Accession XP_293993.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC345878 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC345878, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC345878 BINDING SITE, designated SEQ ID:12611, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53404] Another function of GAM7776 is therefore inhibition of LOC345878 (Accession XP_293993.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC345878.

[53405] LOC346653 (Accession XP_294357.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC346653 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC346653, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC346653 BINDING SITE, designated SEQ ID:17927, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53406] Another function of GAM7776 is therefore inhibition of LOC346653 (Accession XP_294357.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC346653.

[53407] LOC347648 (Accession XP_300226.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC347648 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC347648, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC347648 BINDING SITE, designated SEQ ID:9837, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53408] Another function of GAM7776 is therefore inhibition of LOC347648 (Accession XP_300226.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC347648.

[53409] LOC347764 (Accession XP_300530.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC347764 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC347764, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC347764 BINDING SITE, designated SEQ ID:11420, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53410] Another function of GAM7776 is therefore inhibition of

LOC347764 (Accession XP_300530.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC347764.

[53411] LOC347905 (Accession XP_302624.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC347905 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC347905, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC347905 BINDING SITE, designated SEQ ID:9505, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53412] Another function of GAM7776 is therefore inhibition of LOC347905 (Accession XP_302624.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC347905.

[53413] LOC347918 (Accession XP_300565.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC347918 BINDING SITE is a target binding site found in

the 5' untranslated region of mRNA encoded by LOC347918, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC347918 BINDING SITE, designated SEQ ID:17689, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53414] Another function of GAM7776 is therefore inhibition of LOC347918 (Accession XP_300565.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC347918.

[53415] LOC348075 (Accession XP_302653.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC348075 BINDING SITE1 and LOC348075 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC348075, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348075 BINDING SITE1 and LOC348075 BINDING SITE2, designated SEQ ID:13716 and SEQ ID:14381 respectively, to the

nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53416] Another function of GAM7776 is therefore inhibition of LOC348075 (Accession XP_302653.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348075.

[53417] LOC348094 (Accession XP_300615.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC348094 BINDING SITE1 and LOC348094 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC348094, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348094 BINDING SITE1 and LOC348094 BINDING SITE2, designated SEQ ID:13332 and SEQ ID:16473 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53418] Another function of GAM7776 is therefore inhibition of LOC348094 (Accession XP_300615.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC348094.

[53419] LOC348113 (Accession XP_300623.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC348113 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC348113, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348113 BINDING SITE, designated SEQ ID:12479, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53420] Another function of GAM7776 is therefore inhibition of LOC348113 (Accession XP_300623.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348113.

[53421] LOC348115 (Accession XP_300626.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC348115 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC348115, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348115 BINDING SITE, designated SEQ ID:13705, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53422] Another function of GAM7776 is therefore inhibition of LOC348115 (Accession XP_300626.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348115.

[53423] LOC348137 (Accession XP_300635.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC348137 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC348137, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348137 BINDING SITE, designated SEQ ID:12479, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53424] Another function of GAM7776 is therefore inhibition of LOC348137 (Accession XP_300635.1) . Accordingly, utili-

ties of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348137.

[53425] LOC348142 (Accession XP_300636.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC348142 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC348142, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348142 BINDING SITE, designated SEQ ID:12479, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53426] Another function of GAM7776 is therefore inhibition of LOC348142 (Accession XP_300636.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348142.

[53427] LOC348235 (Accession XP_300670.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC348235 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by

LOC348235, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348235 BINDING SITE, designated SEQ ID:15852, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53428] Another function of GAM7776 is therefore inhibition of LOC348235 (Accession XP_300670.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348235.

[53429] LOC348262 (Accession XP_300683.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC348262 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC348262, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348262 BINDING SITE, designated SEQ ID:7306, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53430] Another function of GAM7776 is therefore inhibition of LOC348262 (Accession XP_300683.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348262.

[53431] LOC348314 (Accession XP_302716.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC348314 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC348314, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348314 BINDING SITE, designated SEQ ID:16669, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53432] Another function of GAM7776 is therefore inhibition of LOC348314 (Accession XP_302716.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348314.

[53433] LOC348326 (Accession XP_300696.1) is another GAM7776 target gene, herein designated TARGET GENE.

LOC348326 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC348326, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348326 BINDING SITE, designated SEQ ID:19778, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53434] Another function of GAM7776 is therefore inhibition of LOC348326 (Accession XP_300696.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348326.

[53435] LOC348327 (Accession XP_030209.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC348327 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC348327, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348327 BINDING SITE, designated SEQ ID:8820, to the nucleotide sequence of

GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53436] Another function of GAM7776 is therefore inhibition of LOC348327 (Accession XP_030209.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348327.

[53437] LOC348393 (Accession XP_302741.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC348393 BINDING SITE1 and LOC348393 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC348393, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348393 BINDING SITE1 and LOC348393 BINDING SITE2, designated SEQ ID:872 and SEQ ID:11192 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53438] Another function of GAM7776 is therefore inhibition of LOC348393 (Accession XP_302741.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC348393.

[53439] LOC348396 (Accession XP_300729.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC348396 BINDING SITE1 through LOC348396 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC348396, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348396 BINDING SITE1 through LOC348396 BINDING SITE3, designated SEQ ID:10270, SEQ ID:1569 and SEQ ID:9545 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53440] Another function of GAM7776 is therefore inhibition of LOC348396 (Accession XP_300729.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348396.

[53441] LOC348402 (Accession XP_300730.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC348402 BINDING SITE1 through LOC348402 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC348402, corresponding to

target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348402 BINDING SITE1 through LOC348402 BINDING SITE3, designated SEQ ID:695, SEQ ID:7386 and SEQ ID:8590 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53442] Another function of GAM7776 is therefore inhibition of LOC348402 (Accession XP_300730.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348402.

[53443] LOC348445 (Accession XP_300738.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC348445 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC348445, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348445 BINDING SITE, designated SEQ ID:19778, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53444] Another function of GAM7776 is therefore inhibition of LOC348445 (Accession XP_300738.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348445.

[53445] LOC348455 (Accession XP_302760.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC348455 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC348455, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348455 BINDING SITE, designated SEQ ID:15049, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53446] Another function of GAM7776 is therefore inhibition of LOC348455 (Accession XP_302760.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348455.

[53447] LOC348460 (Accession XP_300743.1) is another GAM7776 target gene, herein designated TARGET GENE.

LOC348460 BINDING SITE1 and LOC348460 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC348460, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348460 BINDING SITE1 and LOC348460 BINDING SITE2, designated SEQ ID:4143 and SEQ ID:13465 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53448] Another function of GAM7776 is therefore inhibition of LOC348460 (Accession XP_300743.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348460.

[53449] LOC348474 (Accession XP_209299.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC348474 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC348474, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348474 BINDING SITE, design-

nated SEQ ID:17206, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53450] Another function of GAM7776 is therefore inhibition of LOC348474 (Accession XP_209299.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348474.

[53451] LOC348494 (Accession XP_302789.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC348494 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC348494, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348494 BINDING SITE, designated SEQ ID:6119, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53452] Another function of GAM7776 is therefore inhibition of LOC348494 (Accession XP_302789.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC348494.

[53453] LOC348503 (Accession XP_300762.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC348503 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC348503, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348503 BINDING SITE, designated SEQ ID:19361, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53454] Another function of GAM7776 is therefore inhibition of LOC348503 (Accession XP_300762.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348503.

[53455] LOC348508 (Accession XP_302806.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC348508 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC348508, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348508 BINDING SITE, designated SEQ ID:12803, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53456] Another function of GAM7776 is therefore inhibition of LOC348508 (Accession XP_302806.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348508.

[53457] LOC348525 (Accession XP_300778.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC348525 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC348525, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348525 BINDING SITE, designated SEQ ID:5488, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53458] Another function of GAM7776 is therefore inhibition of LOC348525 (Accession XP_300778.1) . Accordingly, utili-

ties of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348525.

[53459] LOC348532 (Accession XP_302818.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC348532 BINDING SITE1 and LOC348532 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC348532, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348532 BINDING SITE1 and LOC348532 BINDING SITE2, designated SEQ ID:11192 and SEQ ID:872 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53460] Another function of GAM7776 is therefore inhibition of LOC348532 (Accession XP_302818.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348532.

[53461] LOC348583 (Accession XP_302833.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC348583 BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by LOC348583, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348583 BINDING SITE, designated SEQ ID:8544, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53462] Another function of GAM7776 is therefore inhibition of LOC348583 (Accession XP_302833.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348583.

[53463] LOC348594 (Accession XP_302834.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC348594 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC348594, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348594 BINDING SITE, designated SEQ ID:16785, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also design-

nated SEQ ID:246.

[53464] Another function of GAM7776 is therefore inhibition of LOC348594 (Accession XP_302834.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348594.

[53465] LOC348595 (Accession XP_302837.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC348595 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC348595, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348595 BINDING SITE, designated SEQ ID:16785, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53466] Another function of GAM7776 is therefore inhibition of LOC348595 (Accession XP_302837.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348595.

[53467] LOC348603 (Accession XP_302844.1) is another

GAM7776 target gene, herein designated TARGET GENE. LOC348603 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC348603, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348603 BINDING SITE, designated SEQ ID:16785, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53468] Another function of GAM7776 is therefore inhibition of LOC348603 (Accession XP_302844.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348603.

[53469] LOC348605 (Accession XP_300793.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC348605 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC348605, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348605 BINDING SITE, design-

nated SEQ ID:16785, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53470] Another function of GAM7776 is therefore inhibition of LOC348605 (Accession XP_300793.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348605.

[53471] LOC348702 (Accession XP_300808.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC348702 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC348702, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348702 BINDING SITE, designated SEQ ID:7387, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53472] Another function of GAM7776 is therefore inhibition of LOC348702 (Accession XP_300808.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC348702.

[53473] LOC348790 (Accession XP_300843.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC348790 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC348790, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348790 BINDING SITE, designated SEQ ID:810, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53474] Another function of GAM7776 is therefore inhibition of LOC348790 (Accession XP_300843.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348790.

[53475] LOC348797 (Accession XP_302888.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC348797 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC348797, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348797 BINDING SITE, designated SEQ ID:7741, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53476] Another function of GAM7776 is therefore inhibition of LOC348797 (Accession XP_302888.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348797.

[53477] LOC348798 (Accession XP_300845.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC348798 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC348798, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348798 BINDING SITE, designated SEQ ID:19402, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53478] Another function of GAM7776 is therefore inhibition of LOC348798 (Accession XP_300845.1) . Accordingly, utili-

ties of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348798.

[53479] LOC348825 (Accession XP_300853.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC348825 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC348825, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348825 BINDING SITE, designated SEQ ID:15126, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53480] Another function of GAM7776 is therefore inhibition of LOC348825 (Accession XP_300853.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348825.

[53481] LOC348842 (Accession XP_300861.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC348842 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by

LOC348842, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348842 BINDING SITE, designated SEQ ID:12803, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53482] Another function of GAM7776 is therefore inhibition of LOC348842 (Accession XP_300861.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348842.

[53483] LOC348947 (Accession XP_302929.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC348947 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC348947, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348947 BINDING SITE, designated SEQ ID:8605, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53484] Another function of GAM7776 is therefore inhibition of LOC348947 (Accession XP_302929.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348947.

[53485] LOC348995 (Accession XP_300434.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC348995 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC348995, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348995 BINDING SITE, designated SEQ ID:1900, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53486] Another function of GAM7776 is therefore inhibition of LOC348995 (Accession XP_300434.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348995.

[53487] LOC349024 (Accession XP_300250.1) is another GAM7776 target gene, herein designated TARGET GENE.

LOC349024 BINDING SITE1 and LOC349024 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC349024, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349024 BINDING SITE1 and LOC349024 BINDING SITE2, designated SEQ ID:1746 and SEQ ID:4617 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53488] Another function of GAM7776 is therefore inhibition of LOC349024 (Accession XP_300250.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349024.

[53489] LOC349075 (Accession XP_300932.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC349075 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC349075, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349075 BINDING SITE, design-

nated SEQ ID:16022, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53490] Another function of GAM7776 is therefore inhibition of LOC349075 (Accession XP_300932.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349075.

[53491] LOC349096 (Accession XP_300937.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC349096 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC349096, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349096 BINDING SITE, designated SEQ ID:6188, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53492] Another function of GAM7776 is therefore inhibition of LOC349096 (Accession XP_300937.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC349096.

[53493] LOC349114 (Accession XP_302960.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC349114 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC349114, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349114 BINDING SITE, designated SEQ ID:12803, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53494] Another function of GAM7776 is therefore inhibition of LOC349114 (Accession XP_302960.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349114.

[53495] LOC349170 (Accession XP_300969.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC349170 BINDING SITE1 through LOC349170 BINDING SITE5 are target binding sites found in untranslated regions of mRNA encoded by LOC349170, corresponding to target binding sites such as BINDING SITE I, BINDING SITE

II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349170 BINDING SITE1 through LOC349170 BINDING SITE5, designated SEQ ID:18074, SEQ ID:958, SEQ ID:3349, SEQ ID:11508 and SEQ ID:9545 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53496] Another function of GAM7776 is therefore inhibition of LOC349170 (Accession XP_300969.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349170.

[53497] LOC349251 (Accession XP_300251.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC349251 BINDING SITE1 and LOC349251 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC349251, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349251 BINDING SITE1 and LOC349251 BINDING SITE2, designated SEQ ID:4454 and SEQ ID:2323 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated

GAM RNA, also designated SEQ ID:246.

[53498] Another function of GAM7776 is therefore inhibition of LOC349251 (Accession XP_300251.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349251.

[53499] LOC349360 (Accession XP_088528.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC349360 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC349360, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349360 BINDING SITE, designated SEQ ID:10639, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53500] Another function of GAM7776 is therefore inhibition of LOC349360 (Accession XP_088528.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349360.

[53501] LOC349408 (Accession XP_303044.1) is another

GAM7776 target gene, herein designated TARGET GENE. LOC349408 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC349408, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349408 BINDING SITE, designated SEQ ID:13466, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53502] Another function of GAM7776 is therefore inhibition of LOC349408 (Accession XP_303044.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349408.

[53503] LOC349440 (Accession XP_300513.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC349440 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC349440, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349440 BINDING SITE, design-

nated SEQ ID:4112, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53504] Another function of GAM7776 is therefore inhibition of LOC349440 (Accession XP_300513.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349440.

[53505] LOC350106 (Accession XP_303810.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC350106 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC350106, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC350106 BINDING SITE, designated SEQ ID:18715, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53506] Another function of GAM7776 is therefore inhibition of LOC350106 (Accession XP_303810.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC350106.

[53507] LOC350914 (Accession XP_304556.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC350914 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC350914, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC350914 BINDING SITE, designated SEQ ID:19860, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53508] Another function of GAM7776 is therefore inhibition of LOC350914 (Accession XP_304556.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC350914.

[53509] LOC51058 (Accession NP_056995.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC51058 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC51058, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of LOC51058 BINDING SITE, designated SEQ ID:5678, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53510] Another function of GAM7776 is therefore inhibition of LOC51058 (Accession NP_056995.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC51058.

[53511] LOC51193 (Accession NP_057415.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC51193 BINDING SITE1 and LOC51193 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC51193, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC51193 BINDING SITE1 and LOC51193 BINDING SITE2, designated SEQ ID:14721 and SEQ ID:3111 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53512] Another function of GAM7776 is therefore inhibition of LOC51193 (Accession NP_057415.1) . Accordingly, utili-

ties of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC51193.

[53513] LOC51257 (Accession NP_057580.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC51257 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC51257, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC51257 BINDING SITE, designated SEQ ID:14855, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53514] Another function of GAM7776 is therefore inhibition of LOC51257 (Accession NP_057580.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC51257.

[53515] LOC51334 (Accession NP_057728.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC51334 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC51334, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC51334 BINDING SITE, designated SEQ ID:8243, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53516] Another function of GAM7776 is therefore inhibition of LOC51334 (Accession NP_057728.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC51334.

[53517] LOC51336 (Accession NP_057730.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC51336 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC51336, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC51336 BINDING SITE, designated SEQ ID:18703, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53518] Another function of GAM7776 is therefore inhibition of LOC51336 (Accession NP_057730.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC51336.

[53519] LOC55954 (Accession NP_061976.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC55954 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC55954, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC55954 BINDING SITE, designated SEQ ID:17853, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53520] Another function of GAM7776 is therefore inhibition of LOC55954 (Accession NP_061976.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC55954.

[53521] LOC56902 (Accession NP_064528.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC56902 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC56902, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of LOC56902 BINDING SITE, designated SEQ ID:5945, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53522] Another function of GAM7776 is therefore inhibition of LOC56902 (Accession NP_064528.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC56902.

[53523] LOC56926 (Accession NP_064555.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC56926 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC56926, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC56926 BINDING SITE, designated SEQ ID:8643, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53524] Another function of GAM7776 is therefore inhibition of LOC56926 (Accession NP_064555.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC56926.

[53525] LOC57107 (Accession NP_065114.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC57107 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC57107, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC57107 BINDING SITE, designated SEQ ID:16916, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53526] Another function of GAM7776 is therefore inhibition of LOC57107 (Accession NP_065114.2). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC57107.

[53527] LOC57146 (Accession NP_065155.2) is another GAM7776 target gene, herein designated TARGET GENE. LOC57146 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC57146, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

LOC57146 BINDING SITE, designated SEQ ID:11036, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53528] Another function of GAM7776 is therefore inhibition of LOC57146 (Accession NP_065155.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC57146.

[53529] LOC89894 (Accession NP_612350.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC89894 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC89894, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC89894 BINDING SITE, designated SEQ ID:14184, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53530] Another function of GAM7776 is therefore inhibition of LOC89894 (Accession NP_612350.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC89894.

[53531] LOC90408 (Accession XP_031517.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC90408 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC90408, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC90408 BINDING SITE, designated SEQ ID:7704, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53532] Another function of GAM7776 is therefore inhibition of LOC90408 (Accession XP_031517.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC90408.

[53533] LOC90485 (Accession XP_032059.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC90485 BINDING SITE1 and LOC90485 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC90485, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC90485 BINDING SITE1

and LOC90485 BINDING SITE2, designated SEQ ID:18698 and SEQ ID:6896 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53534] Another function of GAM7776 is therefore inhibition of LOC90485 (Accession XP_032059.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC90485.

[53535] LOC90719 (Accession XP_033704.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC90719 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC90719, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC90719 BINDING SITE, designated SEQ ID:13994, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53536] Another function of GAM7776 is therefore inhibition of LOC90719 (Accession XP_033704.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC90719.

[53537] LOC90999 (Accession XP_035410.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC90999 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC90999, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC90999 BINDING SITE, designated SEQ ID:15038, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53538] Another function of GAM7776 is therefore inhibition of LOC90999 (Accession XP_035410.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC90999.

[53539] LOC91115 (Accession XP_036218.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC91115 BINDING SITE1 through LOC91115 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC91115, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of

the nucleotide sequences of LOC91115 BINDING SITE1 through LOC91115 BINDING SITE3, designated SEQ ID:12591, SEQ ID:19989 and SEQ ID:17831 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53540] Another function of GAM7776 is therefore inhibition of LOC91115 (Accession XP_036218.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC91115.

[53541] LOC91170 (Accession XP_036612.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC91170 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC91170, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC91170 BINDING SITE, designated SEQ ID:16178, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53542] Another function of GAM7776 is therefore inhibition of LOC91170 (Accession XP_036612.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC91170.

[53543] LOC91250 (Accession XP_037135.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC91250 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC91250, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC91250 BINDING SITE, designated SEQ ID:8577, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53544] Another function of GAM7776 is therefore inhibition of LOC91250 (Accession XP_037135.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC91250.

[53545] LOC91266 (Accession XP_037268.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC91266 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC91266, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of LOC91266 BINDING SITE, designated SEQ ID:18355, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53546] Another function of GAM7776 is therefore inhibition of LOC91266 (Accession XP_037268.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC91266.

[53547] LOC91373 (Accession XP_038063.5) is another GAM7776 target gene, herein designated TARGET GENE. LOC91373 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC91373, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC91373 BINDING SITE, designated SEQ ID:9077, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53548] Another function of GAM7776 is therefore inhibition of LOC91373 (Accession XP_038063.5) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC91373.

[53549] LOC91549 (Accession XP_039115.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC91549 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC91549, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC91549 BINDING SITE, designated SEQ ID:17238, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53550] Another function of GAM7776 is therefore inhibition of LOC91549 (Accession XP_039115.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC91549.

[53551] LOC91661 (Accession NP_612381.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC91661 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC91661, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

LOC91661 BINDING SITE, designated SEQ ID:8303, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53552] Another function of GAM7776 is therefore inhibition of LOC91661 (Accession NP_612381.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC91661.

[53553] LOC91663 (Accession NP_612382.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC91663 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC91663, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC91663 BINDING SITE, designated SEQ ID:8075, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53554] Another function of GAM7776 is therefore inhibition of LOC91663 (Accession NP_612382.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC91663.

[53555] LOC91893 (Accession XP_041340.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC91893 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC91893, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC91893 BINDING SITE, designated SEQ ID:14589, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53556] Another function of GAM7776 is therefore inhibition of LOC91893 (Accession XP_041340.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC91893.

[53557] LOC92148 (Accession XP_043160.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC92148 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC92148, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC92148 BINDING SITE, designated SEQ ID:4097, to the

nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53558] Another function of GAM7776 is therefore inhibition of LOC92148 (Accession XP_043160.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC92148.

[53559] LOC92597 (Accession NP_775739.1) is another GAM7776 target gene, herein designated TARGET GENE. LOC92597 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC92597, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC92597 BINDING SITE, designated SEQ ID:19339, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53560] Another function of GAM7776 is therefore inhibition of LOC92597 (Accession NP_775739.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC92597.

[53561] LOC93132 (Accession XP_049396.1) is another GAM7776

target gene, herein designated TARGET GENE. LOC93132 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC93132, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC93132 BINDING SITE, designated SEQ ID:9953, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53562] Another function of GAM7776 is therefore inhibition of LOC93132 (Accession XP_049396.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC93132.

[53563] Lanosterol synthase (2,3-oxidosqualene-lanosterol cyclase) (LSS, Accession NP_002331.2) is another GAM7776 target gene, herein designated TARGET GENE. LSS BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LSS, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LSS BINDING SITE, designated SEQ ID:6091, to the nucleotide sequence

of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53564] Another function of GAM7776 is therefore inhibition of Lanosterol synthase (2,3-oxidosqualene-lanosterol cyclase) (LSS, Accession NP_002331.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LSS.

[53565] Leukotriene b4 receptor (LTB4R, Accession NP_000743.1) is another GAM7776 target gene, herein designated TARGET GENE. LTB4R BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LTB4R, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LTB4R BINDING SITE, designated SEQ ID:1022, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53566] Another function of GAM7776 is therefore inhibition of Leukotriene b4 receptor (LTB4R, Accession NP_000743.1), a gene which may be the cardiac p2y receptor involved in the regulation of cardiac muscle contraction through modulation of I_l- type calcium currents. Accordingly, utili-

ties of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LTB4R.

[53567] The function of LTB4R and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1. Leukotriene b4 receptor 2 (LTB4R2, Accession NP_062813.1) is another GAM7776 target gene, herein designated TARGET GENE. LTB4R2 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LTB4R2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LTB4R2 BINDING SITE, designated SEQ ID:15504, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53568] Another function of GAM7776 is therefore inhibition of Leukotriene b4 receptor 2 (LTB4R2, Accession NP_062813.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LTB4R2.

[53569] Lymphocyte antigen 75 (LY75, Accession NP_002340.1) is

another GAM7776 target gene, herein designated TARGET GENE. LY75 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LY75, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LY75 BINDING SITE, designated SEQ ID:17724, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53570] Another function of GAM7776 is therefore inhibition of Lymphocyte antigen 75 (LY75, Accession NP_002340.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LY75.

[53571] Lysozyme (renal amyloidosis) (LYZ, Accession NP_000230.1) is another GAM7776 target gene, herein designated TARGET GENE. LYZ BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LYZ, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LYZ BINDING SITE, designated SEQ ID:7382, to the nucleotide sequence of GAM7776

RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53572] Another function of GAM7776 is therefore inhibition of Lysozyme (renal amyloidosis) (LYZ, Accession NP_000230.1), a gene which a bacteriolytic enzyme. and therefore may be associated with Renal amyloidosis. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Renal amyloidosis, and of other diseases and clinical conditions associated with LYZ.

[53573] The function of LYZ and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1. Leucine zipper, putative tumor suppressor 1 (LZTS1, Accession NP_066300.1) is another GAM7776 target gene, herein designated TARGET GENE. LZTS1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LZTS1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LZTS1 BINDING SITE, designated SEQ ID:4518, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53574] Another function of GAM7776 is therefore inhibition of Leucine zipper, putative tumor suppressor 1 (LZTS1, Accession NP_066300.1), a gene which is an essential component of the nucleoskeleton. potential role in crosslinking filaments or anchoring other molecules. it is essential for growth. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LZTS1.

[53575] The function of LZTS1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM130.1.MAC30 (Accession XP_031536.2) is another GAM7776 target gene, herein designated TARGET GENE. MAC30 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MAC30, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MAC30 BINDING SITE, designated SEQ ID:5069, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53576] Another function of GAM7776 is therefore inhibition of MAC30 (Accession XP_031536.2) . Accordingly, utilities of

GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MAC30.

[53577] MAIL (Accession NP_113607.1) is another GAM7776 target gene, herein designated TARGET GENE. MAIL BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MAIL, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MAIL BINDING SITE, designated SEQ ID:2338, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53578] Another function of GAM7776 is therefore inhibition of MAIL (Accession NP_113607.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MAIL.

[53579] Male germ cell-associated kinase (MAK, Accession NP_005897.1) is another GAM7776 target gene, herein designated TARGET GENE. MAK BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MAK, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the

nucleotide sequences of MAK BINDING SITE, designated SEQ ID:1989, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53580] Another function of GAM7776 is therefore inhibition of Male germ cell-associated kinase (MAK, Accession NP_005897.1), a gene which plays an important role in spermatogenesis. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MAK.

[53581] The function of MAK and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1.MAPA (Accession NP_660299.1) is another GAM7776 target gene, herein designated TARGET GENE. MAPA BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MAPA, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MAPA BINDING SITE, designated SEQ ID:5231, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53582] Another function of GAM7776 is therefore inhibition of MAPA (Accession NP_660299.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MAPA.

[53583] Mitogen-activated protein kinase 8 interacting protein 3 (MAPK8IP3, Accession NP_203750.1) is another GAM7776 target gene, herein designated TARGET GENE. MAPK8IP3 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by MAPK8IP3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MAPK8IP3 BINDING SITE, designated SEQ ID:14298, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53584] Another function of GAM7776 is therefore inhibition of Mitogen-activated protein kinase 8 interacting protein 3 (MAPK8IP3, Accession NP_203750.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MAPK8IP3.

[53585] MCLC (Accession NP_055942.1) is another GAM7776 tar-

get gene, herein designated TARGET GENE. MCLC BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MCLC, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MCLC BINDING SITE, designated SEQ ID:7270, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53586] Another function of GAM7776 is therefore inhibition of MCLC (Accession NP_055942.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MCLC.

[53587] Mdm2, transformed 3t3 cell double minute 2, p53 binding protein (mouse) (MDM2, Accession NP_006873.1) is another GAM7776 target gene, herein designated TARGET GENE. MDM2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by MDM2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MDM2 BINDING SITE, designated SEQ ID:6671, to the nucleotide sequence of

GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53588] Another function of GAM7776 is therefore inhibition of Mdm2, transformed 3t3 cell double minute 2, p53 binding protein (mouse) (MDM2, Accession NP_006873.1), a gene which binds to and downmodulates p53 (TP53) and retinoblastoma protein (RB1) function. and therefore may be associated with Tumors (including soft tissue sarcomas, osteosarcomas and gliomas). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Tumors (including soft tissue sarcomas, osteosarcomas and gliomas), and of other diseases and clinical conditions associated with MDM2.

[53589] The function of MDM2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1. Mdm2, transformed 3t3 cell double minute 2, p53 binding protein (mouse) (MDM2, Accession NP_006870.1) is another GAM7776 target gene, herein designated TARGET GENE. MDM2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by MDM2, corresponding to a target binding site such as BINDING SITE I, BIND-

ING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MDM2 BINDING SITE, designated SEQ ID:6671, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53590] Another function of GAM7776 is therefore inhibition of Mdm2, transformed 3t3 cell double minute 2, p53 binding protein (mouse) (MDM2, Accession NP_006870.1), a gene which binds to and downmodulates p53 (TP53) and retinoblastoma protein (RB1) function. and therefore may be associated with Tumors (including soft tissue sarcomas, osteosarcomas and gliomas). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Tumors (including soft tissue sarcomas, osteosarcomas and gliomas)., and of other diseases and clinical conditions associated with MDM2.

[53591] The function of MDM2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1.Mdm2, transformed 3t3 cell double minute 2, p53 binding protein (mouse) (MDM2, Accession NP_006871.1) is another GAM7776 target gene, herein designated TARGET GENE. MDM2 BINDING SITE is a target

binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by MDM2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MDM2 BINDING SITE, designated SEQ ID:6671, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53592] Another function of GAM7776 is therefore inhibition of Mdm2, transformed 3t3 cell double minute 2, p53 binding protein (mouse) (MDM2, Accession NP_006871.1), a gene which binds to and downmodulates p53 (TP53) and retinoblastoma protein (RB1) function. and therefore may be associated with Tumors (including soft tissue sarcomas, osteosarcomas and gliomas). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Tumors (including soft tissue sarcomas, osteosarcomas and gliomas), and of other diseases and clinical conditions associated with MDM2.

[53593] The function of MDM2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1.Mdm2, transformed 3t3 cell double minute

2, p53 binding protein (mouse) (MDM2, Accession NP_006869.1) is another GAM7776 target gene, herein designated TARGET GENE. MDM2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by MDM2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MDM2 BINDING SITE, designated SEQ ID:6671, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53594] Another function of GAM7776 is therefore inhibition of Mdm2, transformed 3t3 cell double minute 2, p53 binding protein (mouse) (MDM2, Accession NP_006869.1), a gene which binds to and downmodulates p53 (TP53) and retinoblastoma protein (RB1) function. and therefore may be associated with Tumors (including soft tissue sarcomas, osteosarcomas and gliomas). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Tumors (including soft tissue sarcomas, osteosarcomas and gliomas)., and of other diseases and clinical conditions associated with MDM2.

[53595] The function of MDM2 and its association with various

diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1. Mdm2, transformed 3t3 cell double minute 2, p53 binding protein (mouse) (MDM2, Accession NP_002383.1) is another GAM7776 target gene, herein designated TARGET GENE. MDM2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by MDM2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MDM2 BINDING SITE, designated SEQ ID:6671, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53596] Another function of GAM7776 is therefore inhibition of Mdm2, transformed 3t3 cell double minute 2, p53 binding protein (mouse) (MDM2, Accession NP_002383.1), a gene which binds to and downmodulates p53 (TP53) and retinoblastoma protein (RB1) function. and therefore may be associated with Tumors (including soft tissue sarcomas, osteosarcomas and gliomas). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Tumors (including soft tissue sarcomas, osteosarcomas

and gliomas), and of other diseases and clinical conditions associated with MDM2.

[53597] The function of MDM2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1.Mdm2, transformed 3t3 cell double minute 2, p53 binding protein (mouse) (MDM2, Accession NP_006872.1) is another GAM7776 target gene, herein designated TARGET GENE. MDM2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by MDM2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MDM2 BINDING SITE, designated SEQ ID:6671, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53598] Another function of GAM7776 is therefore inhibition of Mdm2, transformed 3t3 cell double minute 2, p53 binding protein (mouse) (MDM2, Accession NP_006872.1), a gene which binds to and downmodulates p53 (TP53) and retinoblastoma protein (RB1) function. and therefore may be associated with Tumors (including soft tissue sarco-

mas, osteosarcomas and gliomas). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Tumors (including soft tissue sarcomas, osteosarcomas and gliomas)., and of other diseases and clinical conditions associated with MDM2.

[53599] The function of MDM2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1.Mdm4, transformed 3t3 cell double minute 4, p53 binding protein (mouse) (MDM4, Accession NP_002384.1) is another GAM7776 target gene, herein designated TARGET GENE. MDM4 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MDM4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MDM4 BINDING SITE, designated SEQ ID:7078, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53600] Another function of GAM7776 is therefore inhibition of Mdm4, transformed 3t3 cell double minute 4, p53 binding protein (mouse) (MDM4, Accession NP_002384.1), a gene

which Strongly similar to murine Mdm4; may interact with p53. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MDM4.

[53601] The function of MDM4 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1. Mediterranean fever (MEFV, Accession NP_000234.1) is another GAM7776 target gene, herein designated TARGET GENE. MEFV BINDING SITE1 and MEFV BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by MEFV, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MEFV BINDING SITE1 and MEFV BINDING SITE2, designated SEQ ID:5443 and SEQ ID:19829 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53602] Another function of GAM7776 is therefore inhibition of Mediterranean fever (MEFV, Accession NP_000234.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions as-

sociated with MEFV.

[53603] Mesoderm development candidate 2 (MESDC2, Accession XP_051854.1) is another GAM7776 target gene, herein designated TARGET GENE. MESDC2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MESDC2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MESDC2 BINDING SITE, designated SEQ ID:6523, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53604] Another function of GAM7776 is therefore inhibition of Mesoderm development candidate 2 (MESDC2, Accession XP_051854.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MESDC2.

[53605] MFTC (Accession NP_110407.2) is another GAM7776 target gene, herein designated TARGET GENE. MFTC BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MFTC, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the com-

plementarity of the nucleotide sequences of MFTC BINDING SITE, designated SEQ ID:16545, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53606] Another function of GAM7776 is therefore inhibition of MFTC (Accession NP_110407.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MFTC.

[53607] Mannosyl (alpha-1,6-)-glycoprotein beta-1,2-n-acetylglucosaminyltransferase (MGAT2, Accession NP_079374.1) is another GAM7776 target gene, herein designated TARGET GENE. MGAT2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by MGAT2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGAT2 BINDING SITE, designated SEQ ID:9699, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53608] Another function of GAM7776 is therefore inhibition of Mannosyl (alpha-1,6-)-glycoprotein beta-1,2-n-acetylglucosaminyltransferase (MGAT2, Accession

NP_079374.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGAT2.

[53609] MGC10772 (Accession NP_085044.2) is another GAM7776 target gene, herein designated TARGET GENE. MGC10772 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MGC10772, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC10772 BINDING SITE, designated SEQ ID:5386, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53610] Another function of GAM7776 is therefore inhibition of MGC10772 (Accession NP_085044.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC10772.

[53611] MGC10818 (Accession NP_085045.2) is another GAM7776 target gene, herein designated TARGET GENE. MGC10818 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC10818, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC10818 BINDING SITE, designated SEQ ID:2199, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53612] Another function of GAM7776 is therefore inhibition of MGC10818 (Accession NP_085045.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC10818.

[53613] MGC11102 (Accession NP_115701.2) is another GAM7776 target gene, herein designated TARGET GENE. MGC11102 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC11102, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC11102 BINDING SITE, designated SEQ ID:17609, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53614] Another function of GAM7776 is therefore inhibition of MGC11102 (Accession NP_115701.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with MGC11102.

[53615] MGC12262 (Accession NP_116085.1) is another GAM7776 target gene, herein designated TARGET GENE. MGC12262 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MGC12262, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC12262 BINDING SITE, designated SEQ ID:12220, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53616] Another function of GAM7776 is therefore inhibition of MGC12262 (Accession NP_116085.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC12262.

[53617] MGC12518 (Accession NP_291026.1) is another GAM7776 target gene, herein designated TARGET GENE. MGC12518 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC12518, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of MGC12518 BINDING SITE, designated SEQ ID:18251, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53618] Another function of GAM7776 is therefore inhibition of MGC12518 (Accession NP_291026.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC12518.

[53619] MGC13017 (Accession NP_542387.1) is another GAM7776 target gene, herein designated TARGET GENE. MGC13017 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC13017, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC13017 BINDING SITE, designated SEQ ID:11562, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53620] Another function of GAM7776 is therefore inhibition of MGC13017 (Accession NP_542387.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

MGC13017.

[53621] MGC13024 (Accession NP_689501.1) is another GAM7776 target gene, herein designated TARGET GENE. MGC13024 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC13024, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC13024 BINDING SITE, designated SEQ ID:13564, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53622] Another function of GAM7776 is therefore inhibition of MGC13024 (Accession NP_689501.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC13024.

[53623] MGC13138 (Accession NP_219363.1) is another GAM7776 target gene, herein designated TARGET GENE. MGC13138 BINDING SITE1 and MGC13138 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by MGC13138, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of

the nucleotide sequences of MGC13138 BINDING SITE1 and MGC13138 BINDING SITE2, designated SEQ ID:6646 and SEQ ID:9543 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53624] Another function of GAM7776 is therefore inhibition of MGC13138 (Accession NP_219363.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC13138.

[53625] MGC13170 (Accession NP_116101.1) is another GAM7776 target gene, herein designated TARGET GENE. MGC13170 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC13170, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC13170 BINDING SITE, designated SEQ ID:20116, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53626] Another function of GAM7776 is therefore inhibition of MGC13170 (Accession NP_116101.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with MGC13170.

[53627] MGC13204 (Accession NP_113653.1) is another GAM7776 target gene, herein designated TARGET GENE. MGC13204 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC13204, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC13204 BINDING SITE, designated SEQ ID:9494, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53628] Another function of GAM7776 is therefore inhibition of MGC13204 (Accession NP_113653.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC13204.

[53629] MGC14289 (Accession NP_542391.1) is another GAM7776 target gene, herein designated TARGET GENE. MGC14289 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC14289, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of MGC14289 BINDING SITE, designated SEQ ID:3677, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53630] Another function of GAM7776 is therefore inhibition of MGC14289 (Accession NP_542391.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC14289.

[53631] MGC14436 (Accession NP_116286.1) is another GAM7776 target gene, herein designated TARGET GENE. MGC14436 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MGC14436, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC14436 BINDING SITE, designated SEQ ID:17347, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53632] Another function of GAM7776 is therefore inhibition of MGC14436 (Accession NP_116286.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

MGC14436.

[53633] MGC14836 (Accession NP_219480.1) is another GAM7776 target gene, herein designated TARGET GENE. MGC14836 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC14836, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC14836 BINDING SITE, designated SEQ ID:15044, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53634] Another function of GAM7776 is therefore inhibition of MGC14836 (Accession NP_219480.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC14836.

[53635] MGC15419 (Accession NP_079011.2) is another GAM7776 target gene, herein designated TARGET GENE. MGC15419 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC15419, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

MGC15419 BINDING SITE, designated SEQ ID:15115, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53636] Another function of GAM7776 is therefore inhibition of MGC15419 (Accession NP_079011.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC15419.

[53637] MGC15606 (Accession NP_659474.1) is another GAM7776 target gene, herein designated TARGET GENE. MGC15606 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MGC15606, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC15606 BINDING SITE, designated SEQ ID:10968, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53638] Another function of GAM7776 is therefore inhibition of MGC15606 (Accession NP_659474.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC15606.

[53639] MGC15668 (Accession NP_116145.1) is another GAM7776 target gene, herein designated TARGET GENE. MGC15668 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC15668, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC15668 BINDING SITE, designated SEQ ID:3620, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53640] Another function of GAM7776 is therefore inhibition of MGC15668 (Accession NP_116145.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC15668.

[53641] MGC15873 (Accession NP_116309.1) is another GAM7776 target gene, herein designated TARGET GENE. MGC15873 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MGC15873, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC15873 BINDING SITE, designated SEQ ID:2894, to the

nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53642] Another function of GAM7776 is therefore inhibition of MGC15873 (Accession NP_116309.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC15873.

[53643] MGC1842 (Accession XP_037797.2) is another GAM7776 target gene, herein designated TARGET GENE. MGC1842 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC1842, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC1842 BINDING SITE, designated SEQ ID:15046, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53644] Another function of GAM7776 is therefore inhibition of MGC1842 (Accession XP_037797.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC1842.

[53645] MGC21675 (Accession NP_443093.1) is another GAM7776

target gene, herein designated TARGET GENE. MGC21675 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC21675, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC21675 BINDING SITE, designated SEQ ID:16916, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53646] Another function of GAM7776 is therefore inhibition of MGC21675 (Accession NP_443093.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC21675.

[53647] MGC21738 (Accession NP_659481.1) is another GAM7776 target gene, herein designated TARGET GENE. MGC21738 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC21738, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC21738 BINDING SITE, designated SEQ ID:8134, to the nucleotide sequence of GAM7776 RNA, herein designated

GAM RNA, also designated SEQ ID:246.

[53648] Another function of GAM7776 is therefore inhibition of MGC21738 (Accession NP_659481.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC21738.

[53649] MGC2306 (Accession NP_002041.2) is another GAM7776 target gene, herein designated TARGET GENE. MGC2306 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC2306, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC2306 BINDING SITE, designated SEQ ID:7160, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53650] Another function of GAM7776 is therefore inhibition of MGC2306 (Accession NP_002041.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC2306.

[53651] MGC2474 (Accession NP_076420.1) is another GAM7776 target gene, herein designated TARGET GENE. MGC2474

BINDING SITE1 and MGC2474 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by MGC2474, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC2474 BINDING SITE1 and MGC2474 BINDING SITE2, designated SEQ ID:18665 and SEQ ID:7797 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53652] Another function of GAM7776 is therefore inhibition of MGC2474 (Accession NP_076420.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC2474.

[53653] MGC2477 (Accession NP_077004.1) is another GAM7776 target gene, herein designated TARGET GENE. MGC2477 BINDING SITE1 through MGC2477 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by MGC2477, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC2477 BINDING SITE1

through MGC2477 BINDING SITE3, designated SEQ ID:19729, SEQ ID:5609 and SEQ ID:8610 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53654] Another function of GAM7776 is therefore inhibition of MGC2477 (Accession NP_077004.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC2477.

[53655] MGC2603 (Accession NP_076942.1) is another GAM7776 target gene, herein designated TARGET GENE. MGC2603 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC2603, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC2603 BINDING SITE, designated SEQ ID:5845, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53656] Another function of GAM7776 is therefore inhibition of MGC2603 (Accession NP_076942.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

MGC2603.

[53657] MGC2718 (Accession NP_076972.2) is another GAM7776 target gene, herein designated TARGET GENE. MGC2718 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC2718, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC2718 BINDING SITE, designated SEQ ID:3976, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53658] Another function of GAM7776 is therefore inhibition of MGC2718 (Accession NP_076972.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC2718.

[53659] MGC27345 (Accession XP_300964.1) is another GAM7776 target gene, herein designated TARGET GENE. MGC27345 BINDING SITE1 and MGC27345 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by MGC27345, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates

the complementarity of the nucleotide sequences of MGC27345 BINDING SITE1 and MGC27345 BINDING SITE2, designated SEQ ID:19385 and SEQ ID:18352 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53660] Another function of GAM7776 is therefore inhibition of MGC27345 (Accession XP_300964.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC27345.

[53661] MGC29891 (Accession NP_653219.1) is another GAM7776 target gene, herein designated TARGET GENE. MGC29891 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC29891, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC29891 BINDING SITE, designated SEQ ID:14858, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53662] Another function of GAM7776 is therefore inhibition of MGC29891 (Accession NP_653219.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with MGC29891.

[53663] MGC29898 (Accession NP_659485.1) is another GAM7776 target gene, herein designated TARGET GENE. MGC29898 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC29898, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC29898 BINDING SITE, designated SEQ ID:16672, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53664] Another function of GAM7776 is therefore inhibition of MGC29898 (Accession NP_659485.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC29898.

[53665] MGC3113 (Accession NP_076940.1) is another GAM7776 target gene, herein designated TARGET GENE. MGC3113 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC3113, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of MGC3113 BINDING SITE, designated SEQ ID:10136, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53666] Another function of GAM7776 is therefore inhibition of MGC3113 (Accession NP_076940.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC3113.

[53667] MGC3207 (Accession NP_115661.1) is another GAM7776 target gene, herein designated TARGET GENE. MGC3207 BINDING SITE1 and MGC3207 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by MGC3207, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC3207 BINDING SITE1 and MGC3207 BINDING SITE2, designated SEQ ID:5157 and SEQ ID:13812 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53668] Another function of GAM7776 is therefore inhibition of MGC3207 (Accession NP_115661.1) . Accordingly, utilities

of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC3207.

[53669] MGC3329 (Accession NP_076991.2) is another GAM7776 target gene, herein designated TARGET GENE. MGC3329 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC3329, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC3329 BINDING SITE, designated SEQ ID:4477, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53670] Another function of GAM7776 is therefore inhibition of MGC3329 (Accession NP_076991.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC3329.

[53671] MGC33637 (Accession NP_689809.1) is another GAM7776 target gene, herein designated TARGET GENE. MGC33637 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC33637, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC33637 BINDING SITE, designated SEQ ID:12069, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53672] Another function of GAM7776 is therefore inhibition of MGC33637 (Accession NP_689809.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC33637.

[53673] MGC33887 (Accession NP_659473.1) is another GAM7776 target gene, herein designated TARGET GENE. MGC33887 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC33887, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC33887 BINDING SITE, designated SEQ ID:8724, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53674] Another function of GAM7776 is therefore inhibition of MGC33887 (Accession NP_659473.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with MGC33887.

[53675] MGC34034 (Accession NP_694956.1) is another GAM7776 target gene, herein designated TARGET GENE. MGC34034 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MGC34034, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC34034 BINDING SITE, designated SEQ ID:9529, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53676] Another function of GAM7776 is therefore inhibition of MGC34034 (Accession NP_694956.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC34034.

[53677] MGC34079 (Accession NP_689688.1) is another GAM7776 target gene, herein designated TARGET GENE. MGC34079 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC34079, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of MGC34079 BINDING SITE, designated SEQ ID:19817, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53678] Another function of GAM7776 is therefore inhibition of MGC34079 (Accession NP_689688.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC34079.

[53679] MGC34132 (Accession XP_291029.1) is another GAM7776 target gene, herein designated TARGET GENE. MGC34132 BINDING SITE1 and MGC34132 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by MGC34132, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC34132 BINDING SITE1 and MGC34132 BINDING SITE2, designated SEQ ID:9087 and SEQ ID:8232 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53680] Another function of GAM7776 is therefore inhibition of MGC34132 (Accession XP_291029.1) . Accordingly, utili-

ties of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC34132.

[53681] MGC35136 (Accession NP_689640.1) is another GAM7776 target gene, herein designated TARGET GENE. MGC35136 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MGC35136, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC35136 BINDING SITE, designated SEQ ID:8535, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53682] Another function of GAM7776 is therefore inhibition of MGC35136 (Accession NP_689640.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC35136.

[53683] MGC35440 (Accession NP_694952.1) is another GAM7776 target gene, herein designated TARGET GENE. MGC35440 BINDING SITE1 and MGC35440 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by MGC35440, corresponding to target binding

sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC35440 BINDING SITE1 and MGC35440 BINDING SITE2, designated SEQ ID:6886 and SEQ ID:7378 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53684] Another function of GAM7776 is therefore inhibition of MGC35440 (Accession NP_694952.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC35440.

[53685] MGC35468 (Accession NP_694976.1) is another GAM7776 target gene, herein designated TARGET GENE. MGC35468 BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by MGC35468, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC35468 BINDING SITE, designated SEQ ID:7484, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53686] Another function of GAM7776 is therefore inhibition of

MGC35468 (Accession NP_694976.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC35468.

[53687] MGC35521 (Accession NP_659502.1) is another GAM7776 target gene, herein designated TARGET GENE. MGC35521 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC35521, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC35521 BINDING SITE, designated SEQ ID:18741, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53688] Another function of GAM7776 is therefore inhibition of MGC35521 (Accession NP_659502.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC35521.

[53689] MGC3771 (Accession NP_112232.1) is another GAM7776 target gene, herein designated TARGET GENE. MGC3771 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MGC3771, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC3771 BINDING SITE, designated SEQ ID:3231, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53690] Another function of GAM7776 is therefore inhibition of MGC3771 (Accession NP_112232.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC3771.

[53691] MGC39320 (Accession NP_689642.2) is another GAM7776 target gene, herein designated TARGET GENE. MGC39320 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC39320, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC39320 BINDING SITE, designated SEQ ID:13428, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53692] Another function of GAM7776 is therefore inhibition of MGC39320 (Accession NP_689642.2) . Accordingly, utili-

ties of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC39320.

[53693] MGC40157 (Accession NP_689563.1) is another GAM7776 target gene, herein designated TARGET GENE. MGC40157 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC40157, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC40157 BINDING SITE, designated SEQ ID:10743, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53694] Another function of GAM7776 is therefore inhibition of MGC40157 (Accession NP_689563.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC40157.

[53695] MGC40168 (Accession NP_714920.1) is another GAM7776 target gene, herein designated TARGET GENE. MGC40168 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MGC40168, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC40168 BINDING SITE, designated SEQ ID:7220, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53696] Another function of GAM7776 is therefore inhibition of MGC40168 (Accession NP_714920.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC40168.

[53697] MGC40579 (Accession NP_689989.1) is another GAM7776 target gene, herein designated TARGET GENE. MGC40579 BINDING SITE1 and MGC40579 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by MGC40579, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC40579 BINDING SITE1 and MGC40579 BINDING SITE2, designated SEQ ID:16218 and SEQ ID:19220 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53698] Another function of GAM7776 is therefore inhibition of

MGC40579 (Accession NP_689989.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC40579.

[53699] MGC4248 (Accession NP_115709.2) is another GAM7776 target gene, herein designated TARGET GENE. MGC4248 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC4248, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC4248 BINDING SITE, designated SEQ ID:3338, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53700] Another function of GAM7776 is therefore inhibition of MGC4248 (Accession NP_115709.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC4248.

[53701] MGC43122 (Accession NP_775784.1) is another GAM7776 target gene, herein designated TARGET GENE. MGC43122 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC43122, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC43122 BINDING SITE, designated SEQ ID:12783, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53702] Another function of GAM7776 is therefore inhibition of MGC43122 (Accession NP_775784.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC43122.

[53703] MGC50337 (Accession NP_848604.1) is another GAM7776 target gene, herein designated TARGET GENE. MGC50337 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC50337, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC50337 BINDING SITE, designated SEQ ID:2959, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53704] Another function of GAM7776 is therefore inhibition of MGC50337 (Accession NP_848604.1) . Accordingly, utili-

ties of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC50337.

[53705] MGC50452 (Accession NP_775733.1) is another GAM7776 target gene, herein designated TARGET GENE. MGC50452 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC50452, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC50452 BINDING SITE, designated SEQ ID:16867, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53706] Another function of GAM7776 is therefore inhibition of MGC50452 (Accession NP_775733.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC50452.

[53707] MGC50559 (Accession NP_776163.1) is another GAM7776 target gene, herein designated TARGET GENE. MGC50559 BINDING SITE1 and MGC50559 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by MGC50559, corresponding to target binding

sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC50559 BINDING SITE1 and MGC50559 BINDING SITE2, designated SEQ ID:15151 and SEQ ID:11296 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53708] Another function of GAM7776 is therefore inhibition of MGC50559 (Accession NP_776163.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC50559.

[53709] MGC9912 (Accession NP_542395.1) is another GAM7776 target gene, herein designated TARGET GENE. MGC9912 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC9912, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC9912 BINDING SITE, designated SEQ ID:12221, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53710] Another function of GAM7776 is therefore inhibition of

MGC9912 (Accession NP_542395.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC9912.

[53711] MGRN1 (Accession XP_048119.4) is another GAM7776 target gene, herein designated TARGET GENE. MGRN1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGRN1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGRN1 BINDING SITE, designated SEQ ID:16616, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53712] Another function of GAM7776 is therefore inhibition of MGRN1 (Accession XP_048119.4) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGRN1.

[53713] Mhc class ii transactivator (MHC2TA, Accession NP_000237.1) is another GAM7776 target gene, herein designated TARGET GENE. MHC2TA BINDING SITE1 through MHC2TA BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by

MHC2TA, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MHC2TA BINDING SITE1 through MHC2TA BINDING SITE3, designated SEQ ID:922, SEQ ID:783 and SEQ ID:2053 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53714] Another function of GAM7776 is therefore inhibition of Mhc class ii transactivator (MHC2TA, Accession NP_000237.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MHC2TA.

[53715] MIRAB13 (Accession NP_203744.1) is another GAM7776 target gene, herein designated TARGET GENE. MIRAB13 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by MIRAB13, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MIRAB13 BINDING SITE, designated SEQ ID:11523, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ

ID:246.

[53716] Another function of GAM7776 is therefore inhibition of MIRAB13 (Accession NP_203744.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MIRAB13.

[53717] MIRAB13 (Accession XP_039236.6) is another GAM7776 target gene, herein designated TARGET GENE. MIRAB13 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by MIRAB13, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MIRAB13 BINDING SITE, designated SEQ ID:11523, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53718] Another function of GAM7776 is therefore inhibition of MIRAB13 (Accession XP_039236.6) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MIRAB13.

[53719] Makorin, ring finger protein, 4 (MKRN4, Accession

NP_110384.1) is another GAM7776 target gene, herein designated TARGET GENE. MKRN4 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MKRN4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MKRN4 BINDING SITE, designated SEQ ID:12075, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53720] Another function of GAM7776 is therefore inhibition of Makorin, ring finger protein, 4 (MKRN4, Accession NP_110384.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MKRN4.

[53721] Melan-a (MLANA, Accession NP_005502.1) is another GAM7776 target gene, herein designated TARGET GENE. MLANA BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MLANA, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MLANA BINDING SITE, designated SEQ ID:13029, to the

nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53722] Another function of GAM7776 is therefore inhibition of Melan-a (MLANA, Accession NP_005502.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MLANA.

[53723] Megalencephalic leukoencephalopathy with subcortical cysts 1 (MLC1, Accession NP_055981.1) is another GAM7776 target gene, herein designated TARGET GENE. MLC1 BINDING SITE1 and MLC1 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by MLC1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MLC1 BINDING SITE1 and MLC1 BINDING SITE2, designated SEQ ID:14833 and SEQ ID:19859 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53724] Another function of GAM7776 is therefore inhibition of Megalencephalic leukoencephalopathy with subcortical cysts 1 (MLC1, Accession NP_055981.1) . Accordingly,

utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MLC1.

[53725] Megalencephalic leukoencephalopathy with subcortical cysts 1 (MLC1, Accession NP_631941.1) is another GAM7776 target gene, herein designated TARGET GENE. MLC1 BINDING SITE1 and MLC1 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by MLC1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MLC1 BINDING SITE1 and MLC1 BINDING SITE2, designated SEQ ID:19859 and SEQ ID:19859 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53726] Another function of GAM7776 is therefore inhibition of Megalencephalic leukoencephalopathy with subcortical cysts 1 (MLC1, Accession NP_631941.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MLC1.

[53727] Megalencephalic leukoencephalopathy with subcortical

cysts 1 (MLC1, Accession NP_631941.1) is another GAM7776 target gene, herein designated TARGET GENE. MLC1 BINDING SITE1 and MLC1 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by MLC1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MLC1 BINDING SITE1 and MLC1 BINDING SITE2, designated SEQ ID:14833 and SEQ ID:19859 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53728] Another function of GAM7776 is therefore inhibition of Megalencephalic leukoencephalopathy with subcortical cysts 1 (MLC1, Accession NP_631941.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MLC1.

[53729] Melanoma-derived leucine zipper, extra-nuclear factor (MLZE, Accession NP_113603.1) is another GAM7776 target gene, herein designated TARGET GENE. MLZE BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MLZE, corresponding to a

target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MLZE BINDING SITE, designated SEQ ID:9728, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53730] Another function of GAM7776 is therefore inhibition of Melanoma-derived leucine zipper, extra-nuclear factor (MLZE, Accession NP_113603.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MLZE.

[53731] Matrix metalloproteinase-like 1 (MMPL1, Accession NP_004133.1) is another GAM7776 target gene, herein designated TARGET GENE. MMPL1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MMPL1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MMPL1 BINDING SITE, designated SEQ ID:4374, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53732] Another function of GAM7776 is therefore inhibition of

Matrix metalloproteinase-like 1 (MMPL1, Accession NP_004133.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MMPL1.

[53733] Modulator of apoptosis 1 (MOAP1, Accession NP_071434.2) is another GAM7776 target gene, herein designated TARGET GENE. MOAP1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MOAP1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MOAP1 BINDING SITE, designated SEQ ID:1744, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53734] Another function of GAM7776 is therefore inhibition of Modulator of apoptosis 1 (MOAP1, Accession NP_071434.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MOAP1.

[53735] moblak (Accession NP_570719.1) is another GAM7776 target gene, herein designated TARGET GENE. moblak BINDING SITE is a target binding site found in the 3' un-

translated region of mRNA encoded by moblak, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of moblak BINDING SITE, designated SEQ ID:19657, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53736] Another function of GAM7776 is therefore inhibition of moblak (Accession NP_570719.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with moblak.

[53737] Molybdenum cofactor synthesis 3 (MOCS3, Accession NP_055299.1) is another GAM7776 target gene, herein designated TARGET GENE. MOCS3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MOCS3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MOCS3 BINDING SITE, designated SEQ ID:12064, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53738] Another function of GAM7776 is therefore inhibition of

Molybdenum cofactor synthesis 3 (MOCS3, Accession NP_055299.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MOCS3.

[53739] Myeloproliferative leukemia virus oncogene (MPL, Accession NP_005364.1) is another GAM7776 target gene, herein designated TARGET GENE. MPL BINDING SITE1 and MPL BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by MPL, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MPL BINDING SITE1 and MPL BINDING SITE2, designated SEQ ID:11185 and SEQ ID:16608 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53740] Another function of GAM7776 is therefore inhibition of Myeloproliferative leukemia virus oncogene (MPL, Accession NP_005364.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MPL.

[53741] Mitochondrial ribosomal protein I35 (MRPL35, Accession NP_057706.2) is another GAM7776 target gene, herein

designated TARGET GENE. MRPL35 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by MRPL35, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MRPL35 BINDING SITE, designated SEQ ID:9545, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53742] Another function of GAM7776 is therefore inhibition of Mitochondrial ribosomal protein I35 (MRPL35, Accession NP_057706.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MRPL35.

[53743] Mitochondrial ribosomal protein I44 (MRPL44, Accession NP_075066.1) is another GAM7776 target gene, herein designated TARGET GENE. MRPL44 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MRPL44, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MRPL44 BINDING SITE, designated SEQ ID:14596, to the nucleotide se-

quence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53744] Another function of GAM7776 is therefore inhibition of Mitochondrial ribosomal protein I44 (MRPL44, Accession NP_075066.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MRPL44.

[53745] Mitochondrial ribosomal protein I49 (MRPL49, Accession NP_004918.1) is another GAM7776 target gene, herein designated TARGET GENE. MRPL49 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MRPL49, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MRPL49 BINDING SITE, designated SEQ ID:5438, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53746] Another function of GAM7776 is therefore inhibition of Mitochondrial ribosomal protein I49 (MRPL49, Accession NP_004918.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MRPL49.

[53747] Mitochondrial ribosomal protein s27 (MRPS27, Accession NP_055899.1) is another GAM7776 target gene, herein designated TARGET GENE. MRPS27 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MRPS27, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MRPS27 BINDING SITE, designated SEQ ID:4179, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53748] Another function of GAM7776 is therefore inhibition of Mitochondrial ribosomal protein s27 (MRPS27, Accession NP_055899.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MRPS27.

[53749] MSTP028 (Accession NP_114160.1) is another GAM7776 target gene, herein designated TARGET GENE. MSTP028 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MSTP028, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

MSTP028 BINDING SITE, designated SEQ ID:12951, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53750] Another function of GAM7776 is therefore inhibition of MSTP028 (Accession NP_114160.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MSTP028.

[53751] MTH2 (Accession NP_060753.1) is another GAM7776 target gene, herein designated TARGET GENE. MTH2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MTH2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MTH2 BINDING SITE, designated SEQ ID:15874, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53752] Another function of GAM7776 is therefore inhibition of MTH2 (Accession NP_060753.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MTH2.

[53753] V-myc myelocytomatosis viral oncogene homolog 2

(avian) (MYCL2, Accession NP_005368.1) is another GAM7776 target gene, herein designated TARGET GENE. MYCL2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MYCL2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MYCL2 BINDING SITE, designated SEQ ID:16868, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53754] Another function of GAM7776 is therefore inhibition of V-myc myelocytomatosis viral oncogene homolog 2 (avian) (MYCL2, Accession NP_005368.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MYCL2.

[53755] MYLC2PL (Accession NP_612412.1) is another GAM7776 target gene, herein designated TARGET GENE. MYLC2PL BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MYLC2PL, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MYLC2PL BINDING SITE, designated SEQ ID:3580, to the

nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53756] Another function of GAM7776 is therefore inhibition of MYLC2PL (Accession NP_612412.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MYLC2PL.

[53757] Myosin 5c (MYO5C, Accession NP_061198.1) is another GAM7776 target gene, herein designated TARGET GENE. MYO5C BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MYO5C, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MYO5C BINDING SITE, designated SEQ ID:4306, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53758] Another function of GAM7776 is therefore inhibition of Myosin 5c (MYO5C, Accession NP_061198.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MYO5C.

[53759] NACT (Accession NP_808218.1) is another GAM7776 tar-

get gene, herein designated TARGET GENE. NACT BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by NACT, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NACT BINDING SITE, designated SEQ ID:19968, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53760] Another function of GAM7776 is therefore inhibition of NACT (Accession NP_808218.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NACT.

[53761] Nanog (Accession NP_079141.1) is another GAM7776 target gene, herein designated TARGET GENE. Nanog BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by Nanog, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of Nanog BINDING SITE, designated SEQ ID:11523, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53762] Another function of GAM7776 is therefore inhibition of Nanog (Accession NP_079141.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with Nanog.

[53763] NCAG1 (Accession NP_115536.1) is another GAM7776 target gene, herein designated TARGET GENE. NCAG1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by NCAG1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NCAG1 BINDING SITE, designated SEQ ID:3766, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53764] Another function of GAM7776 is therefore inhibition of NCAG1 (Accession NP_115536.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NCAG1.

[53765] Nuclear receptor coactivator 6 (NCOA6, Accession NP_054790.1) is another GAM7776 target gene, herein designated TARGET GENE. NCOA6 BINDING SITE1 and NCOA6 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by NCOA6, corre-

sponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NCOA6 BINDING SITE1 and NCOA6 BINDING SITE2, designated SEQ ID:12826 and SEQ ID:19446 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53766] Another function of GAM7776 is therefore inhibition of Nuclear receptor coactivator 6 (NCOA6, Accession NP_054790.1), a gene which activates gene transcription through ligand- dependent association with coactivators. and therefore may be associated with Breast cancer. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Breast cancer., and of other diseases and clinical conditions associated with NCOA6.

[53767] The function of NCOA6 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM161.1.Nuclear receptor coactivator 6 interacting protein (NCOA6IP, Accession NP_079107.5) is another GAM7776 target gene, herein designated TARGET GENE. NCOA6IP BINDING SITE1 and NCOA6IP BINDING SITE2 are target binding sites found in untranslated regions of

mRNA encoded by NCOA6IP, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NCOA6IP BINDING SITE1 and NCOA6IP BINDING SITE2, designated SEQ ID:8841 and SEQ ID:10534 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53768] Another function of GAM7776 is therefore inhibition of Nuclear receptor coactivator 6 interacting protein (NCOA6IP, Accession NP_079107.5) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NCOA6IP.

[53769] NDP52 (Accession NP_005822.1) is another GAM7776 target gene, herein designated TARGET GENE. NDP52 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by NDP52, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NDP52 BINDING SITE, designated SEQ ID:15337, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA,

also designated SEQ ID:246.

[53770] Another function of GAM7776 is therefore inhibition of NDP52 (Accession NP_005822.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NDP52.

[53771] Ndrp family member 3 (NDRG3, Accession NP_114402.1) is another GAM7776 target gene, herein designated TARGET GENE. NDRG3 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by NDRG3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NDRG3 BINDING SITE, designated SEQ ID:15102, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53772] Another function of GAM7776 is therefore inhibition of Ndrp family member 3 (NDRG3, Accession NP_114402.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NDRG3.

[53773] NADH dehydrogenase (ubiquinone) 1, subcomplex unknown, 2, 14.5kda (NDUFC2, Accession NP_004540.1) is

another GAM7776 target gene, herein designated TARGET GENE. NDUFC2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by NDUFC2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NDUFC2 BINDING SITE, designated SEQ ID:10192, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53774] Another function of GAM7776 is therefore inhibition of NADH dehydrogenase (ubiquinone) 1, subcomplex unknown, 2, 14.5kda (NDUFC2, Accession NP_004540.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NDUFC2.

[53775] Sialidase 3 (membrane sialidase) (NEU3, Accession NP_006647.2) is another GAM7776 target gene, herein designated TARGET GENE. NEU3 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by NEU3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the

nucleotide sequences of NEU3 BINDING SITE, designated SEQ ID:12075, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53776] Another function of GAM7776 is therefore inhibition of Sialidase 3 (membrane sialidase) (NEU3, Accession NP_006647.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NEU3.

[53777] Neurofibromin 2 (bilateral acoustic neuroma) (NF2, Accession NP_057502.1) is another GAM7776 target gene, herein designated TARGET GENE. NF2 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by NF2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NF2 BINDING SITE, designated SEQ ID:9169, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53778] Another function of GAM7776 is therefore inhibition of Neurofibromin 2 (bilateral acoustic neuroma) (NF2, Accession NP_057502.1) . Accordingly, utilities of GAM7776 in-

clude diagnosis, prevention and treatment of diseases and clinical conditions associated with NF2.

[53779] Non-pou domain containing, octamer-binding (NONO, Accession NP_031389.2) is another GAM7776 target gene, herein designated TARGET GENE. NONO BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by NONO, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NONO BINDING SITE, designated SEQ ID:17960, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53780] Another function of GAM7776 is therefore inhibition of Non-pou domain containing, octamer-binding (NONO, Accession NP_031389.2), a gene which is a nuclear protein which contains RNA recognition motifs. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NONO.

[53781] The function of NONO and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM189.1.NOSIP (Accession NP_057037.1) is another GAM7776 target gene, herein designated TARGET GENE. NOSIP BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by NOSIP, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NOSIP BINDING SITE, designated SEQ ID:7311, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53782] Another function of GAM7776 is therefore inhibition of NOSIP (Accession NP_057037.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NOSIP.

[53783] Neuronal pentraxin receptor (NPTXR, Accession NP_055108.2) is another GAM7776 target gene, herein designated TARGET GENE. NPTXR BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by NPTXR, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NPTXR BINDING SITE, designated SEQ ID:5189, to the nu-

cleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53784] Another function of GAM7776 is therefore inhibition of Neuronal pentraxin receptor (NPTXR, Accession NP_055108.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NPTXR.

[53785] Neuronal pentraxin receptor (NPTXR, Accession NP_478058.1) is another GAM7776 target gene, herein designated TARGET GENE. NPTXR BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by NPTXR, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NPTXR BINDING SITE, designated SEQ ID:5189, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53786] Another function of GAM7776 is therefore inhibition of Neuronal pentraxin receptor (NPTXR, Accession NP_478058.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NPTXR.

[53787] Nad(p)h dehydrogenase, quinone 1 (NQO1, Accession NP_000894.1) is another GAM7776 target gene, herein designated TARGET GENE. NQO1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by NQO1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NQO1 BINDING SITE, designated SEQ ID:14855, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53788] Another function of GAM7776 is therefore inhibition of Nad(p)h dehydrogenase, quinone 1 (NQO1, Accession NP_000894.1), a gene which is cytochrome b5 reductase which reduces redox dyes and quinones. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NQO1.

[53789] The function of NQO1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1. Nuclear receptor subfamily 2, group e, member 1 (NR2E1, Accession NP_003260.1) is another

GAM7776 target gene, herein designated TARGET GENE. NR2E1 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by NR2E1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NR2E1 BINDING SITE, designated SEQ ID:13178, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53790] Another function of GAM7776 is therefore inhibition of Nuclear receptor subfamily 2, group e, member 1 (NR2E1, Accession NP_003260.1), a gene which may be required for brain development and be involved in the regulation of retinal development . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NR2E1.

[53791] The function of NR2E1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1.NRLN1 (Accession NP_660277.1) is another GAM7776 target gene, herein designated TARGET GENE. NRLN1 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by NRLN1, cor-

responding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NRLN1 BINDING SITE, designated SEQ ID:15825, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53792] Another function of GAM7776 is therefore inhibition of NRLN1 (Accession NP_660277.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NRLN1.

[53793] 5'-nucleotidase, cytosolic ii (NT5C2, Accession NP_036361.1) is another GAM7776 target gene, herein designated TARGET GENE. NT5C2 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by NT5C2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NT5C2 BINDING SITE, designated SEQ ID:4030, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53794] Another function of GAM7776 is therefore inhibition of 5'-nucleotidase, cytosolic ii (NT5C2, Accession

NP_036361.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NT5C2.

[53795] Nudix (nucleoside diphosphate linked moiety x)-type motif 4 (NUDT4, Accession NP_061967.2) is another GAM7776 target gene, herein designated TARGET GENE. NUDT4 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by NUDT4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NUDT4 BINDING SITE, designated SEQ ID:18879, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53796] Another function of GAM7776 is therefore inhibition of Nudix (nucleoside diphosphate linked moiety x)-type motif 4 (NUDT4, Accession NP_061967.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NUDT4.

[53797] Nuclear mitotic apparatus protein 1 (NUMA1, Accession NP_006176.1) is another GAM7776 target gene, herein designated TARGET GENE. NUMA1 BINDING SITE is a target

binding site found in the 5' untranslated region of mRNA encoded by NUMA1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NUMA1 BINDING SITE, designated SEQ ID:14343, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53798] Another function of GAM7776 is therefore inhibition of Nuclear mitotic apparatus protein 1 (NUMA1, Accession NP_006176.1), a gene which is nuclear mitotic apparatus protein. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NUMA1.

[53799] The function of NUMA1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM133.1.NUP43 (Accession NP_078923.2) is another GAM7776 target gene, herein designated TARGET GENE. NUP43 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by NUP43, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 il-

illustrates the complementarity of the nucleotide sequences of NUP43 BINDING SITE, designated SEQ ID:1900, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53800] Another function of GAM7776 is therefore inhibition of NUP43 (Accession NP_078923.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NUP43.

[53801] Nucleoredoxin (NXN, Accession NP_071908.1) is another GAM7776 target gene, herein designated TARGET GENE. NXN BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by NXN, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NXN BINDING SITE, designated SEQ ID:935, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53802] Another function of GAM7776 is therefore inhibition of Nucleoredoxin (NXN, Accession NP_071908.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NXN.

[53803] Olfactory receptor, family 51, subfamily e, member 2 (OR51E2, Accession NP_110401.1) is another GAM7776 target gene, herein designated TARGET GENE. OR51E2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by OR51E2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of OR51E2 BINDING SITE, designated SEQ ID:4096, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53804] Another function of GAM7776 is therefore inhibition of Olfactory receptor, family 51, subfamily e, member 2 (OR51E2, Accession NP_110401.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with OR51E2.

[53805] Origin recognition complex, subunit 1-like (yeast) (ORC1L, Accession NP_004144.1) is another GAM7776 target gene, herein designated TARGET GENE. ORC1L BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ORC1L, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ORC1L BINDING SITE, designated SEQ ID:17969, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53806] Another function of GAM7776 is therefore inhibition of Origin recognition complex, subunit 1-like (yeast) (ORC1L, Accession NP_004144.1), a gene which may be required for initiation of DNA replication. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ORC1L.

[53807] The function of ORC1L and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM136.1.Oxysterol binding protein-like 2 (OSBPL2, Accession NP_055650.1) is another GAM7776 target gene, herein designated TARGET GENE. OSBPL2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by OSBPL2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences

of OSBPL2 BINDING SITE, designated SEQ ID:7553, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53808] Another function of GAM7776 is therefore inhibition of Oxysterol binding protein-like 2 (OSBPL2, Accession NP_055650.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with OSBPL2.

[53809] Oxysterol binding protein-like 2 (OSBPL2, Accession NP_653081.1) is another GAM7776 target gene, herein designated TARGET GENE. OSBPL2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by OSBPL2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of OSBPL2 BINDING SITE, designated SEQ ID:7553, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53810] Another function of GAM7776 is therefore inhibition of Oxysterol binding protein-like 2 (OSBPL2, Accession NP_653081.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical

cal conditions associated with OSBPL2.

[53811] Purinergic receptor p2x-like 1, orphan receptor (P2RXL1, Accession NP_005437.1) is another GAM7776 target gene, herein designated TARGET GENE. P2RXL1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by P2RXL1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of P2RXL1 BINDING SITE, designated SEQ ID:4425, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53812] Another function of GAM7776 is therefore inhibition of Purinergic receptor p2x-like 1, orphan receptor (P2RXL1, Accession NP_005437.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with P2RXL1.

[53813] Purinergic receptor p2y, g-protein coupled, 1 (P2RY1, Accession NP_002554.1) is another GAM7776 target gene, herein designated TARGET GENE. P2RY1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by P2RY1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BIND-

ING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of P2RY1 BINDING SITE, designated SEQ ID:8453, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53814] Another function of GAM7776 is therefore inhibition of Purinergic receptor p2y, g-protein coupled, 1 (P2RY1, Accession NP_002554.1), a gene which plays an essential role in thrombotic states. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with P2RY1.

[53815] The function of P2RY1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1.P450RAI-2 (Accession NP_063938.1) is another GAM7776 target gene, herein designated TARGET GENE. P450RAI-2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by P450RAI-2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of P450RAI-2 BINDING SITE, designated SEQ ID:18160, to the nucleotide sequence of

GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53816] Another function of GAM7776 is therefore inhibition of P450RAI-2 (Accession NP_063938.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with P450RAI-2.

[53817] Phosphoribosylaminoimidazole carboxylase, phosphoribosylaminoimidazole succinocarboxamide synthetase (PAICS, Accession NP_006443.1) is another GAM7776 target gene, herein designated TARGET GENE. PAICS BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PAICS, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PAICS BINDING SITE, designated SEQ ID:16852, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53818] Another function of GAM7776 is therefore inhibition of Phosphoribosylaminoimidazole carboxylase, phosphoribosylaminoimidazole succinocarboxamide synthetase (PAICS, Accession NP_006443.1), a gene which is required

for purine biosynthesis. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PAICS.

[53819] The function of PAICS and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM96.1. Pas domain containing serine/threonine kinase (PASK, Accession NP_055963.1) is another GAM7776 target gene, herein designated TARGET GENE. PASK BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by PASK, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PASK BINDING SITE, designated SEQ ID:2769, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53820] Another function of GAM7776 is therefore inhibition of Pas domain containing serine/threonine kinase (PASK, Accession NP_055963.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PASK.

[53821] Protocadherin alpha 9 (PCDHA9, Accession NP_054724.1)

is another GAM7776 target gene, herein designated TARGET GENE. PCDHA9 BINDING SITE1 and PCDHA9 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by PCDHA9, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PCDHA9 BINDING SITE1 and PCDHA9 BINDING SITE2, designated SEQ ID:16048 and SEQ ID:10427 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53822] Another function of GAM7776 is therefore inhibition of Protocadherin alpha 9 (PCDHA9, Accession NP_054724.1), a gene which is a calcium- dependent cell- adhesion protein. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PCDHA9.

[53823] The function of PCDHA9 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1. Protocadherin beta 11 (PCDHB11, Accession NP_061754.1) is another GAM7776 target gene, herein

designated TARGET GENE. PCDHB11 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PCDHB11, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PCDHB11 BINDING SITE, designated SEQ ID:10723, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53824] Another function of GAM7776 is therefore inhibition of Protocadherin beta 11 (PCDHB11, Accession NP_061754.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PCDHB11.

[53825] Protocadherin beta 16 (PCDHB16, Accession NP_066008.1) is another GAM7776 target gene, herein designated TARGET GENE. PCDHB16 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PCDHB16, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PCDHB16 BINDING SITE, designated SEQ ID:4617, to the nucleotide se-

quence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53826] Another function of GAM7776 is therefore inhibition of Protocadherin beta 16 (PCDHB16, Accession NP_066008.1), a gene which is a potential calcium- dependent cell- adhesion protein. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PCDHB16.

[53827] The function of PCDHB16 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1. Protocadherin beta 9 (PCDHB9, Accession NP_061992.2) is another GAM7776 target gene, herein designated TARGET GENE. PCDHB9 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PCDHB9, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PCDHB9 BINDING SITE, designated SEQ ID:11523, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53828] Another function of GAM7776 is therefore inhibition of

Protocadherin beta 9 (PCDHB9, Accession NP_061992.2), a gene which is a potential calcium- dependent cell- adhesion protein. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PCDHB9.

[53829] The function of PCDHB9 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM72.1. Phosphodiesterase 6b, cgmp-specific, rod, beta (congenital stationary night blindness 3, autosomal dominant) (PDE6B, Accession NP_000274.1) is another GAM7776 target gene, herein designated TARGET GENE. PDE6B BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PDE6B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PDE6B BINDING SITE, designated SEQ ID:936, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53830] Another function of GAM7776 is therefore inhibition of Phosphodiesterase 6b, cgmp-specific, rod, beta (congenital stationary night blindness 3, autosomal domi-

nant) (PDE6B, Accession NP_000274.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PDE6B.

[53831] Platelet derived growth factor c (PDGFC, Accession NP_057289.1) is another GAM7776 target gene, herein designated TARGET GENE. PDGFC BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by PDGFC, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PDGFC BINDING SITE, designated SEQ ID:905, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53832] Another function of GAM7776 is therefore inhibition of Platelet derived growth factor c (PDGFC, Accession NP_057289.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PDGFC.

[53833] Pdz and lim domain 2 (mystique) (PDLIM2, Accession NP_789847.1) is another GAM7776 target gene, herein designated TARGET GENE. PDLIM2 BINDING SITE is a target binding site found in the 3` untranslated region of

multiple transcripts of mRNA encoded by PDLIM2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PDLIM2 BINDING SITE, designated SEQ ID:14973, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53834] Another function of GAM7776 is therefore inhibition of Pdz and lim domain 2 (mystique) (PDLIM2, Accession NP_789847.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PDLIM2.

[53835] Pdz domain containing 1 (PDZK1, Accession NP_002605.2) is another GAM7776 target gene, herein designated TARGET GENE. PDZK1 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by PDZK1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PDZK1 BINDING SITE, designated SEQ ID:4194, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53836] Another function of GAM7776 is therefore inhibition of Pdz domain containing 1 (PDZK1, Accession NP_002605.2), a gene which contains PDZ interaction domains, interacts with MAP17, a protein involved in control of cell proliferation. and therefore may be associated with Autosomal dominant hypophosphatemic rickets. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Autosomal dominant hypophosphatemic rickets, and of other diseases and clinical conditions associated with PDZK1.

[53837] The function of PDZK1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM136.1.PDZRN1 (Accession NP_699202.1) is another GAM7776 target gene, herein designated TARGET GENE. PDZRN1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PDZRN1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PDZRN1 BINDING SITE, designated SEQ ID:5270, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53838] Another function of GAM7776 is therefore inhibition of PDZRN1 (Accession NP_699202.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PDZRN1.

[53839] Pellino homolog 1 (drosophila) (PELI1, Accession NP_065702.2) is another GAM7776 target gene, herein designated TARGET GENE. PELI1 BINDING SITE1 through PELI1 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by PELI1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PELI1 BINDING SITE1 through PELI1 BINDING SITE3, designated SEQ ID:7382, SEQ ID:14861 and SEQ ID:5491 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53840] Another function of GAM7776 is therefore inhibition of Pellino homolog 1 (drosophila) (PELI1, Accession NP_065702.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PELI1.

[53841] Period homolog 2 (drosophila) (PER2, Accession

NP_073728.1) is another GAM7776 target gene, herein designated TARGET GENE. PER2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PER2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PER2 BINDING SITE, designated SEQ ID:19703, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53842] Another function of GAM7776 is therefore inhibition of Period homolog 2 (drosophila) (PER2, Accession NP_073728.1), a gene which Period homolog 2; putative circadian clock protein; has a PAS dimerization domain and therefore may be associated with Familial advanced sleep- phase syndrome. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Familial advanced sleep- phase syndrome, and of other diseases and clinical conditions associated with PER2.

[53843] The function of PER2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM130.1.Phosphoribosylformylglycinamide syn-

thase (fgar amidotransferase) (PFAS, Accession NP_036525.1) is another GAM7776 target gene, herein designated TARGET GENE. PFAS BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PFAS, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PFAS BINDING SITE, designated SEQ ID:16261, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53844] Another function of GAM7776 is therefore inhibition of Phosphoribosylformylglycinamide synthase (fgar amidotransferase) (PFAS, Accession NP_036525.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PFAS.

[53845] PHAX (Accession NP_115553.1) is another GAM7776 target gene, herein designated TARGET GENE. PHAX BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PHAX, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the com-

plementarity of the nucleotide sequences of PHAX BINDING SITE, designated SEQ ID:12159, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53846] Another function of GAM7776 is therefore inhibition of PHAX (Accession NP_115553.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PHAX.

[53847] Polymeric immunoglobulin receptor (PIGR, Accession NP_002635.2) is another GAM7776 target gene, herein designated TARGET GENE. PIGR BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PIGR, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PIGR BINDING SITE, designated SEQ ID:11059, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53848] Another function of GAM7776 is therefore inhibition of Polymeric immunoglobulin receptor (PIGR, Accession NP_002635.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clini-

cal conditions associated with PIGR.

[53849] Phosphoinositide-3-kinase, class 2, beta polypeptide (PIK3C2B, Accession NP_002637.2) is another GAM7776 target gene, herein designated TARGET GENE. PIK3C2B BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PIK3C2B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PIK3C2B BINDING SITE, designated SEQ ID:10488, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53850] Another function of GAM7776 is therefore inhibition of Phosphoinositide-3-kinase, class 2, beta polypeptide (PIK3C2B, Accession NP_002637.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PIK3C2B.

[53851] Phosphoinositide-3-kinase, class 3 (PIK3C3, Accession NP_002638.1) is another GAM7776 target gene, herein designated TARGET GENE. PIK3C3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PIK3C3, corresponding to a target binding site

such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PIK3C3 BINDING SITE, designated SEQ ID:8874, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53852] Another function of GAM7776 is therefore inhibition of Phosphoinositide-3-kinase, class 3 (PIK3C3, Accession NP_002638.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PIK3C3.

[53853] Phosphoinositide-3-kinase, catalytic, delta polypeptide (PIK3CD, Accession NP_005017.2) is another GAM7776 target gene, herein designated TARGET GENE. PIK3CD BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PIK3CD, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PIK3CD BINDING SITE, designated SEQ ID:9545, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53854] Another function of GAM7776 is therefore inhibition of

Phosphoinositide-3-kinase, catalytic, delta polypeptide (PIK3CD, Accession NP_005017.2), a gene which regulating cell growth. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PIK3CD.

[53855] The function of PIK3CD and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM136.1.Pbx/knotted 1 homeobox 1 (PKNOX1, Accession NP_004562.2) is another GAM7776 target gene, herein designated TARGET GENE. PKNOX1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PKNOX1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PKNOX1 BINDING SITE, designated SEQ ID:8826, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53856] Another function of GAM7776 is therefore inhibition of Pbx/knotted 1 homeobox 1 (PKNOX1, Accession NP_004562.2), a gene which may regulate gene expression and control cell differentiation. Accordingly, utilities

of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PKNOX1.

[53857] The function of PKNOX1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM55.1. Phospholipase a2, group vi (cytosolic, calcium-independent) (PLA2G6, Accession NP_003551.1) is another GAM7776 target gene, herein designated TARGET GENE. PLA2G6 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PLA2G6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PLA2G6 BINDING SITE, designated SEQ ID:16143, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53858] Another function of GAM7776 is therefore inhibition of Phospholipase a2, group vi (cytosolic, calcium-independent) (PLA2G6, Accession NP_003551.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated

with PLA2G6.

[53859] Pro-melanin-concentrating hormone-like 1 (PMCHL1, Accession NP_114093.1) is another GAM7776 target gene, herein designated TARGET GENE. PMCHL1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PMCHL1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PMCHL1 BINDING SITE, designated SEQ ID:16917, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53860] Another function of GAM7776 is therefore inhibition of Pro-melanin-concentrating hormone-like 1 (PMCHL1, Accession NP_114093.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PMCHL1.

[53861] Pro-melanin-concentrating hormone-like 2 (PMCHL2, Accession NP_114094.1) is another GAM7776 target gene, herein designated TARGET GENE. PMCHL2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PMCHL2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or

BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PMCHL2 BINDING SITE, designated SEQ ID:16917, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53862] Another function of GAM7776 is therefore inhibition of Pro-melanin-concentrating hormone-like 2 (PMCHL2, Accession NP_114094.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PMCHL2.

[53863] PMPCA (Accession NP_055975.1) is another GAM7776 target gene, herein designated TARGET GENE. PMPCA BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PMPCA, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PMPCA BINDING SITE, designated SEQ ID:7640, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53864] Another function of GAM7776 is therefore inhibition of PMPCA (Accession NP_055975.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of

diseases and clinical conditions associated with PMPCA.

[53865] Paraneoplastic antigen ma2 (PNMA2, Accession NP_009188.1) is another GAM7776 target gene, herein designated TARGET GENE. PNMA2 BINDING SITE1 and PNMA2 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by PNMA2, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PNMA2 BINDING SITE1 and PNMA2 BINDING SITE2, designated SEQ ID:8006 and SEQ ID:17067 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53866] Another function of GAM7776 is therefore inhibition of Paraneoplastic antigen ma2 (PNMA2, Accession NP_009188.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PNMA2.

[53867] Protein o-fucosyltransferase 1 (POFUT1, Accession NP_056167.1) is another GAM7776 target gene, herein designated TARGET GENE. POFUT1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by POFUT1, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of POFUT1 BINDING SITE, designated SEQ ID:11287, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53868] Another function of GAM7776 is therefore inhibition of Protein o-fucosyltransferase 1 (POFUT1, Accession NP_056167.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with POFUT1.

[53869] Polymerase (dna directed), epsilon 3 (p17 subunit) (POLE3, Accession NP_059139.2) is another GAM7776 target gene, herein designated TARGET GENE. POLE3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by POLE3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of POLE3 BINDING SITE, designated SEQ ID:6151, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53870] Another function of GAM7776 is therefore inhibition of

Polymerase (dna directed), epsilon 3 (p17 subunit) (POLE3, Accession NP_059139.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with POLE3.

[53871] Polymerase (rna) ii (dna directed) polypeptide d (POLR2D, Accession NP_004796.1) is another GAM7776 target gene, herein designated TARGET GENE. POLR2D BINDING SITE1 and POLR2D BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by POLR2D, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of POLR2D BINDING SITE1 and POLR2D BINDING SITE2, designated SEQ ID:2798 and SEQ ID:5412 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53872] Another function of GAM7776 is therefore inhibition of Polymerase (rna) ii (dna directed) polypeptide d (POLR2D, Accession NP_004796.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with POLR2D.

[53873] Paraoxonase 1 (PON1, Accession NP_000437.3) is another GAM7776 target gene, herein designated TARGET GENE.

PON1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PON1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PON1 BINDING SITE, designated SEQ ID:2152, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53874] Another function of GAM7776 is therefore inhibition of Paraoxonase 1 (PON1, Accession NP_000437.3), a gene which hydrolyzes the toxic metabolites of a variety of organophosphorus insecticides. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PON1.

[53875] The function of PON1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1. Pou domain, class 2, associating factor 1 (POU2AF1, Accession NP_006226.1) is another GAM7776 target gene, herein designated TARGET GENE. POU2AF1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by POU2AF1, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of POU2AF1 BINDING SITE, designated SEQ ID:20135, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53876] Another function of GAM7776 is therefore inhibition of Pou domain, class 2, associating factor 1 (POU2AF1, Accession NP_006226.1), a gene which is a transcriptional coactivator that specifically associates with either oct1 or oct2 and therefore may be associated with A form of b-cell leukemia. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of A form of b-cell leukemia, and of other diseases and clinical conditions associated with POU2AF1.

[53877] The function of POU2AF1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1. Pou domain, class 2, transcription factor 3 (POU2F3, Accession NP_055167.1) is another GAM7776 target gene, herein designated TARGET GENE. POU2F3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by POU2F3, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of POU2F3 BINDING SITE, designated SEQ ID:16114, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53878] Another function of GAM7776 is therefore inhibition of Pou domain, class 2, transcription factor 3 (POU2F3, Accession NP_055167.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with POU2F3.

[53879] PP1628 (Accession NP_079477.1) is another GAM7776 target gene, herein designated TARGET GENE. PP1628 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by PP1628, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PP1628 BINDING SITE, designated SEQ ID:10180, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53880] Another function of GAM7776 is therefore inhibition of PP1628 (Accession NP_079477.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of

diseases and clinical conditions associated with PP1628.

[53881] PP3111 (Accession NP_071439.2) is another GAM7776 target gene, herein designated TARGET GENE. PP3111 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PP3111, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PP3111 BINDING SITE, designated SEQ ID:10883, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53882] Another function of GAM7776 is therefore inhibition of PP3111 (Accession NP_071439.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PP3111.

[53883] PP3856 (Accession NP_660202.1) is another GAM7776 target gene, herein designated TARGET GENE. PP3856 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by PP3856, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PP3856 BINDING SITE, designated SEQ ID:10744, to the

nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53884] Another function of GAM7776 is therefore inhibition of PP3856 (Accession NP_660202.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PP3856.

[53885] Phosphatidic acid phosphatase type 2c (PPAP2C, Accession NP_003703.1) is another GAM7776 target gene, herein designated TARGET GENE. PPAP2C BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PPAP2C, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PPAP2C BINDING SITE, designated SEQ ID:7299, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53886] Another function of GAM7776 is therefore inhibition of Phosphatidic acid phosphatase type 2c (PPAP2C, Accession NP_003703.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PPAP2C.

[53887] Phosphatidic acid phosphatase type 2c (PPAP2C, Accession NP_003703.1) is another GAM7776 target gene, herein designated TARGET GENE. PPAP2C BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PPAP2C, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PPAP2C BINDING SITE, designated SEQ ID:7299, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

sion NP_803545.1) is another GAM7776 target gene, herein designated TARGET GENE. PPAP2C BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PPAP2C, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PPAP2C BINDING SITE, designated SEQ ID:7299, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53888] Another function of GAM7776 is therefore inhibition of Phosphatidic acid phosphatase type 2c (PPAP2C, Accession NP_803545.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PPAP2C.

[53889] Phosphatidic acid phosphatase type 2c (PPAP2C, Accession NP_808211.1) is another GAM7776 target gene, herein designated TARGET GENE. PPAP2C BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PPAP2C, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences

of PPAP2C BINDING SITE, designated SEQ ID:7299, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53890] Another function of GAM7776 is therefore inhibition of Phosphatidic acid phosphatase type 2c (PPAP2C, Accession NP_808211.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PPAP2C.

[53891] Protein phosphatase, ef hand calcium-binding domain 2 (PPEF2, Accession NP_690911.1) is another GAM7776 target gene, herein designated TARGET GENE. PPEF2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PPEF2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PPEF2 BINDING SITE, designated SEQ ID:2954, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53892] Another function of GAM7776 is therefore inhibition of Protein phosphatase, ef hand calcium-binding domain 2 (PPEF2, Accession NP_690911.1), a gene which is a homolog of *Drosophila* rdgC. Accordingly, utilities of

GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PPEF2.

[53893] The function of PPEF2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM66.2. Protein phosphatase, ef hand calcium-binding domain 2 (PPEF2, Accession NP_690910.1) is another GAM7776 target gene, herein designated TARGET GENE. PPEF2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PPEF2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PPEF2 BINDING SITE, designated SEQ ID:2954, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53894] Another function of GAM7776 is therefore inhibition of Protein phosphatase, ef hand calcium-binding domain 2 (PPEF2, Accession NP_690910.1), a gene which is a homolog of *Drosophila* rdgC. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PPEF2.

[53895] The function of PPEF2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM66.2. Protein phosphatase, ef hand calcium-binding domain 2 (PPEF2, Accession NP_006230.2) is another GAM7776 target gene, herein designated TARGET GENE. PPEF2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PPEF2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PPEF2 BINDING SITE, designated SEQ ID:2954, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53896] Another function of GAM7776 is therefore inhibition of Protein phosphatase, ef hand calcium-binding domain 2 (PPEF2, Accession NP_006230.2), a gene which is a homolog of *Drosophila* rdgC. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PPEF2.

[53897] The function of PPEF2 and its association with various diseases and clinical conditions, has been established by

previous studies, as described hereinabove with reference to GAM66.2. Protein tyrosine phosphatase, receptor type, f polypeptide (ptprf), interacting protein (liprin), alpha 4 (PPFIA4, Accession XP_046751.3) is another GAM7776 target gene, herein designated TARGET GENE. PPFIA4 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by PPFIA4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PPFIA4 BINDING SITE, designated SEQ ID:16851, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53898] Another function of GAM7776 is therefore inhibition of Protein tyrosine phosphatase, receptor type, f polypeptide (ptprf), interacting protein (liprin), alpha 4 (PPFIA4, Accession XP_046751.3). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PPFIA4.

[53899] Ptpfr interacting protein, binding protein 1 (liprin beta 1) (PPFIBP1, Accession NP_003613.2) is another GAM7776 target gene, herein designated TARGET GENE. PPFIBP1 BINDING SITE1 through PPFIBP1 BINDING SITE3 are target

binding sites found in untranslated regions of multiple transcripts of mRNA encoded by PPFIBP1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PPFIBP1 BINDING SITE1 through PPFIBP1 BINDING SITE3, designated SEQ ID:12217, SEQ ID:10708 and SEQ ID:8231 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53900] Another function of GAM7776 is therefore inhibition of Ptpfrf interacting protein, binding protein 1 (liprin beta 1) (PPFIBP1, Accession NP_003613.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PP-FIBP1.

[53901] Peptidylprolyl isomerase d (cyclophilin d) (PPID, Accession NP_005029.1) is another GAM7776 target gene, herein designated TARGET GENE. PPID BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PPID, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PPID BINDING SITE, designated

SEQ ID:7378, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53902] Another function of GAM7776 is therefore inhibition of Peptidylprolyl isomerase d (cyclophilin d) (PPID, Accession NP_005029.1), a gene which catalyzes the cis- trans isomerization of proline imidic peptide bonds in oligopeptides. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PPID.

[53903] The function of PPID and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM136.1. Peptidylprolyl isomerase (cyclophilin)-like 2 (PPIL2, Accession NP_055152.1) is another GAM7776 target gene, herein designated TARGET GENE. PPIL2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PPIL2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PPIL2 BINDING SITE, designated SEQ ID:13122, to the nucleotide sequence of GAM7776 RNA, herein des-

ignated GAM RNA, also designated SEQ ID:246.

[53904] Another function of GAM7776 is therefore inhibition of Peptidylprolyl isomerase (cyclophilin)-like 2 (PPIL2, Accession NP_055152.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PPIL2.

[53905] Protein phosphatase 1, regulatory (inhibitor) subunit 12b (PPP1R12B, Accession NP_002472.1) is another GAM7776 target gene, herein designated TARGET GENE. PPP1R12B BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PPP1R12B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PPP1R12B BINDING SITE, designated SEQ ID:3861, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53906] Another function of GAM7776 is therefore inhibition of Protein phosphatase 1, regulatory (inhibitor) subunit 12b (PPP1R12B, Accession NP_002472.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

PPP1R12B.

[53907] Protein phosphatase 1, regulatory (inhibitor) subunit 12b (PPP1R12B, Accession NP_115288.1) is another GAM7776 target gene, herein designated TARGET GENE. PPP1R12B BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PPP1R12B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PPP1R12B BINDING SITE, designated SEQ ID:3861, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53908] Another function of GAM7776 is therefore inhibition of Protein phosphatase 1, regulatory (inhibitor) subunit 12b (PPP1R12B, Accession NP_115288.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PPP1R12B.

[53909] Protein kinase, interferon-inducible double stranded rna dependent (PRKR, Accession NP_002750.1) is another GAM7776 target gene, herein designated TARGET GENE. PRKR BINDING SITE is a target binding site found in the 3'

untranslated region of mRNA encoded by PRKR, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PRKR BINDING SITE, designated SEQ ID:4790, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53910] Another function of GAM7776 is therefore inhibition of Protein kinase, interferon-inducible double stranded rna dependent (PRKR, Accession NP_002750.1), a gene which catalyze the phosphorylation of the alpha subunit of eif2. and therefore may be associated with Huntington's disease. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Huntington's disease, and of other diseases and clinical conditions associated with PRKR.

[53911] The function of PRKR and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM136.1. Protein kinase, lysine deficient 3 (PRKWNK3, Accession NP_065973.1) is another GAM7776 target gene, herein designated TARGET GENE. PRKWNK3 BINDING SITE is a target binding site found in the 3' untranslated re-

gion of mRNA encoded by PRKWNK3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PRKWNK3 BINDING SITE, designated SEQ ID:14862, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53912] Another function of GAM7776 is therefore inhibition of Protein kinase, lysine deficient 3 (PRKWNK3, Accession NP_065973.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PRKWNK3.

[53913] Prion protein 2 (dublet) (PRND, Accession NP_036541.1) is another GAM7776 target gene, herein designated TARGET GENE. PRND BINDING SITE1 and PRND BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by PRND, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PRND BINDING SITE1 and PRND BINDING SITE2, designated SEQ ID:1539 and SEQ ID:4170 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also design-

nated SEQ ID:246.

[53914] Another function of GAM7776 is therefore inhibition of Prion protein 2 (dublet) (PRND, Accession NP_036541.1), a gene which is similar to prion protein PRNP. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PRND.

[53915] The function of PRND and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM116.1.PRO0297 (Accession NP_054800.1) is another GAM7776 target gene, herein designated TARGET GENE. PRO0297 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by PRO0297, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PRO0297 BINDING SITE, designated SEQ ID:10574, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53916] Another function of GAM7776 is therefore inhibition of PRO0297 (Accession NP_054800.1) . Accordingly, utilities

of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PRO0297.

[53917] PRO0365 (Accession NP_054845.1) is another GAM7776 target gene, herein designated TARGET GENE. PRO0365 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by PRO0365, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PRO0365 BINDING SITE, designated SEQ ID:18148, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53918] Another function of GAM7776 is therefore inhibition of PRO0365 (Accession NP_054845.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PRO0365.

[53919] PRO1048 (Accession NP_060967.1) is another GAM7776 target gene, herein designated TARGET GENE. PRO1048 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PRO1048, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PRO1048 BINDING SITE, designated SEQ ID:12596, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53920] Another function of GAM7776 is therefore inhibition of PRO1048 (Accession NP_060967.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PRO1048.

[53921] PRO2730 (Accession NP_079498.1) is another GAM7776 target gene, herein designated TARGET GENE. PRO2730 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PRO2730, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PRO2730 BINDING SITE, designated SEQ ID:2048, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53922] Another function of GAM7776 is therefore inhibition of PRO2730 (Accession NP_079498.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment

of diseases and clinical conditions associated with PROM2730.

[53923] PROM2 (Accession NP_653308.1) is another GAM7776 target gene, herein designated TARGET GENE. PROM2 BINDING SITE1 and PROM2 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by PROM2, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PROM2 BINDING SITE1 and PROM2 BINDING SITE2, designated SEQ ID:13176 and SEQ ID:2147 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53924] Another function of GAM7776 is therefore inhibition of PROM2 (Accession NP_653308.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PROM2.

[53925] Prp31 pre-mrna processing factor 31 homolog (yeast) (PRPF31, Accession NP_056444.1) is another GAM7776 target gene, herein designated TARGET GENE. PRPF31 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PRPF31, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PRPF31 BINDING SITE, designated SEQ ID:11313, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53926] Another function of GAM7776 is therefore inhibition of Prp31 pre-mrna processing factor 31 homolog (yeast) (PRPF31, Accession NP_056444.1), a gene which is likely to be involved in pre- mRNA splicing and therefore is associated with Retinitis pigmentosa. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Retinitis pigmentosa, and of other diseases and clinical conditions associated with PRPF31.

[53927] The function of PRPF31 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1. Proteasome (prosome, macropain) 26s subunit, non-atpase, 9 (PSMD9, Accession NP_002804.2) is another GAM7776 target gene, herein designated TARGET GENE. PSMD9 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PSMD9, corresponding to a target binding site such as

BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PSMD9 BINDING SITE, designated SEQ ID:17758, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53928] Another function of GAM7776 is therefore inhibition of Proteasome (prosome, macropain) 26s subunit, non-atpase, 9 (PSMD9, Accession NP_002804.2), a gene which acts as a regulatory subunit of the 26 proteasome. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PSMD9.

[53929] The function of PSMD9 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1. Phosphoserine phosphatase (PSPH, Accession NP_004568.1) is another GAM7776 target gene, herein designated TARGET GENE. PSPH BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PSPH, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the

nucleotide sequences of PSPH BINDING SITE, designated SEQ ID:15044, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53930] Another function of GAM7776 is therefore inhibition of Phosphoserine phosphatase (PSPH, Accession NP_004568.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PSPH.

[53931] Prostaglandin e synthase (PTGES, Accession NP_004869.1) is another GAM7776 target gene, herein designated TARGET GENE. PTGES BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PTGES, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PTGES BINDING SITE, designated SEQ ID:16070, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53932] Another function of GAM7776 is therefore inhibition of Prostaglandin e synthase (PTGES, Accession NP_004869.1) . Accordingly, utilities of GAM7776 include diagnosis,

prevention and treatment of diseases and clinical conditions associated with PTGES.

[53933] Prostaglandin i2 (prostacyclin) synthase (PTGIS, Accession NP_000952.1) is another GAM7776 target gene, herein designated TARGET GENE. PTGIS BINDING SITE1 and PTGIS BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by PTGIS, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PTGIS BINDING SITE1 and PTGIS BINDING SITE2, designated SEQ ID:17361 and SEQ ID:10783 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53934] Another function of GAM7776 is therefore inhibition of Prostaglandin i2 (prostacyclin) synthase (PTGIS, Accession NP_000952.1), a gene which catalyzes the isomerization of prostaglandin h2 to prostacyclin (= prostaglandin i2). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PTGIS.

[53935] The function of PTGIS and its association with various diseases and clinical conditions, has been established by

previous studies, as described hereinabove with reference to GAM30.1.Ptk2 protein tyrosine kinase 2 (PTK2, Accession NP_005598.3) is another GAM7776 target gene, herein designated TARGET GENE. PTK2 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by PTK2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PTK2 BINDING SITE, designated SEQ ID:10355, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53936] Another function of GAM7776 is therefore inhibition of Ptk2 protein tyrosine kinase 2 (PTK2, Accession NP_005598.3), a gene which involves in intracellular signal transduction pathway and is a putative homolog of chicken focal adhesion associated kinase. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PTK2.

[53937] The function of PTK2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM65.2.Phosphorylase, glycogen; muscle (mcandle syndrome, glycogen storage disease type v) (PYGM, Accession NP_005600.1) is another GAM7776 target gene, herein designated TARGET GENE. PYGM BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by PYGM, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PYGM BINDING SITE, designated SEQ ID:15938, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53938] Another function of GAM7776 is therefore inhibition of Phosphorylase, glycogen; muscle (mcandle syndrome, glycogen storage disease type v) (PYGM, Accession NP_005600.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PYGM.

[53939] RAB11-FIP4 (Accession NP_116321.2) is another GAM7776 target gene, herein designated TARGET GENE. RAB11-FIP4 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RAB11-FIP4, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RAB11-FIP4 BINDING SITE, designated SEQ ID:13848, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53940] Another function of GAM7776 is therefore inhibition of RAB11-FIP4 (Accession NP_116321.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RAB11-FIP4.

[53941] Rab21, member ras oncogene family (RAB21, Accession NP_055814.1) is another GAM7776 target gene, herein designated TARGET GENE. RAB21 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RAB21, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RAB21 BINDING SITE, designated SEQ ID:7076, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53942] Another function of GAM7776 is therefore inhibition of

Rab21, member ras oncogene family (RAB21, Accession NP_055814.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RAB21.

[53943] Rab33b, member ras oncogene family (RAB33B, Accession NP_112586.1) is another GAM7776 target gene, herein designated TARGET GENE. RAB33B BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RAB33B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RAB33B BINDING SITE, designated SEQ ID:7910, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53944] Another function of GAM7776 is therefore inhibition of Rab33b, member ras oncogene family (RAB33B, Accession NP_112586.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RAB33B.

[53945] Rab36, member ras oncogene family (RAB36, Accession NP_004905.1) is another GAM7776 target gene, herein designated TARGET GENE. RAB36 BINDING SITE1 and

RAB36 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by RAB36, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RAB36 BINDING SITE1 and RAB36 BINDING SITE2, designated SEQ ID:1652 and SEQ ID:808 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53946] Another function of GAM7776 is therefore inhibition of Rab36, member ras oncogene family (RAB36, Accession NP_004905.1), a gene which is involved in protein transport. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RAB36.

[53947] The function of RAB36 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM130.1. Rab39, member ras oncogene family (RAB39, Accession XP_084662.1) is another GAM7776 target gene, herein designated TARGET GENE. RAB39 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RAB39, corresponding

to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RAB39 BINDING SITE, designated SEQ ID:3754, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53948] Another function of GAM7776 is therefore inhibition of Rab39, member ras oncogene family (RAB39, Accession XP_084662.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RAB39.

[53949] Rab4a, member ras oncogene family (RAB4A, Accession NP_004569.2) is another GAM7776 target gene, herein designated TARGET GENE. RAB4A BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by RAB4A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RAB4A BINDING SITE, designated SEQ ID:16568, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53950] Another function of GAM7776 is therefore inhibition of

Rab4a, member ras oncogene family (RAB4A, Accession NP_004569.2), a gene which is involved in protein transport. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RAB4A.

[53951] The function of RAB4A and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM55.2. Rab, member of ras oncogene family-like 2a (RABL2A, Accession NP_038198.1) is another GAM7776 target gene, herein designated TARGET GENE. RABL2A BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by RABL2A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RABL2A BINDING SITE, designated SEQ ID:2648, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53952] Another function of GAM7776 is therefore inhibition of Rab, member of ras oncogene family-like 2a (RABL2A, Accession NP_038198.1). Accordingly, utilities of GAM7776

include diagnosis, prevention and treatment of diseases and clinical conditions associated with RABL2A.

[53953] Rab, member of ras oncogene family-like 2b (RABL2B, Accession NP_009012.1) is another GAM7776 target gene, herein designated TARGET GENE. RABL2B BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RABL2B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RABL2B BINDING SITE, designated SEQ ID:2648, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53954] Another function of GAM7776 is therefore inhibition of Rab, member of ras oncogene family-like 2b (RABL2B, Accession NP_009012.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RABL2B.

[53955] RAI (Accession NP_006654.1) is another GAM7776 target gene, herein designated TARGET GENE. RAI BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by RAI, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or

BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RAI BINDING SITE, designated SEQ ID:8937, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53956] Another function of GAM7776 is therefore inhibition of RAI (Accession NP_006654.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RAI.

[53957] Retinoic acid induced 16 (RAI16, Accession NP_073586.3) is another GAM7776 target gene, herein designated TARGET GENE. RAI16 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RAI16, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RAI16 BINDING SITE, designated SEQ ID:4335, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53958] Another function of GAM7776 is therefore inhibition of Retinoic acid induced 16 (RAI16, Accession NP_073586.3) . Accordingly, utilities of GAM7776 include diagnosis,

prevention and treatment of diseases and clinical conditions associated with RAI16.

[53959] Retinoic acid induced 17 (RAI17, Accession XP_166091.2) is another GAM7776 target gene, herein designated TARGET GENE. RAI17 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by RAI17, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RAI17 BINDING SITE, designated SEQ ID:7523, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53960] Another function of GAM7776 is therefore inhibition of Retinoic acid induced 17 (RAI17, Accession XP_166091.2). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RAI17.

[53961] Retinoic acid induced 17 (RAI17, Accession NP_065071.1) is another GAM7776 target gene, herein designated TARGET GENE. RAI17 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by RAI17, corresponding to a target

binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RAI17 BINDING SITE, designated SEQ ID:7523, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53962] Another function of GAM7776 is therefore inhibition of Retinoic acid induced 17 (RAI17, Accession NP_065071.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RAI17.

[53963] Retinoic acid induced 3 (RAI3, Accession NP_003970.1) is another GAM7776 target gene, herein designated TARGET GENE. RAI3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RAI3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RAI3 BINDING SITE, designated SEQ ID:12784, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53964] Another function of GAM7776 is therefore inhibition of Retinoic acid induced 3 (RAI3, Accession NP_003970.1) .

Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RAI3.

[53965] RAP140 (Accession NP_056039.1) is another GAM7776 target gene, herein designated TARGET GENE. RAP140 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RAP140, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RAP140 BINDING SITE, designated SEQ ID:16472, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53966] Another function of GAM7776 is therefore inhibition of RAP140 (Accession NP_056039.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RAP140.

[53967] Retinoic acid receptor, gamma (RARG, Accession NP_000957.1) is another GAM7776 target gene, herein designated TARGET GENE. RARG BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by RARG, corresponding to a target binding site

such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RARG BINDING SITE, designated SEQ ID:11090, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53968] Another function of GAM7776 is therefore inhibition of Retinoic acid receptor, gamma (RARG, Accession NP_000957.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RARG.

[53969] Ras association (ralgds/af-6) domain family 2 (RASSF2, Accession NP_739579.1) is another GAM7776 target gene, herein designated TARGET GENE. RASSF2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by RASSF2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RASSF2 BINDING SITE, designated SEQ ID:19336, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53970] Another function of GAM7776 is therefore inhibition of

Ras association (ralgds/af-6) domain family 2 (RASSF2, Accession NP_739579.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RASSF2.

[53971] Ras association (ralgds/af-6) domain family 2 (RASSF2, Accession NP_739580.1) is another GAM7776 target gene, herein designated TARGET GENE. RASSF2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by RASSF2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RASSF2 BINDING SITE, designated SEQ ID:19336, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53972] Another function of GAM7776 is therefore inhibition of Ras association (ralgds/af-6) domain family 2 (RASSF2, Accession NP_739580.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RASSF2.

[53973] Ras association (ralgds/af-6) domain family 2 (RASSF2, Accession NP_055552.1) is another GAM7776 target gene, herein designated TARGET GENE. RASSF2 BINDING SITE is

a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by RASSF2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RASSF2 BINDING SITE, designated SEQ ID:19336, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53974] Another function of GAM7776 is therefore inhibition of Ras association (ralgds/af-6) domain family 2 (RASSF2, Accession NP_055552.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RASSF2.

[53975] Retinoblastoma binding protein 1 (RBBP1, Accession NP_075376.1) is another GAM7776 target gene, herein designated TARGET GENE. RBBP1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by RBBP1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RBBP1 BINDING SITE, designated SEQ ID:11014, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA,

also designated SEQ ID:246.

[53976] Another function of GAM7776 is therefore inhibition of Retinoblastoma binding protein 1 (RBBP1, Accession NP_075376.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RBBP1.

[53977] Retinoblastoma binding protein 1 (RBBP1, Accession NP_002883.2) is another GAM7776 target gene, herein designated TARGET GENE. RBBP1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by RBBP1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RBBP1 BINDING SITE, designated SEQ ID:11014, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53978] Another function of GAM7776 is therefore inhibition of Retinoblastoma binding protein 1 (RBBP1, Accession NP_002883.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RBBP1.

[53979] Retinoblastoma binding protein 1 (RBBP1, Accession

NP_075377.1) is another GAM7776 target gene, herein designated TARGET GENE. RBBP1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by RBBP1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RBBP1 BINDING SITE, designated SEQ ID:11014, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53980] Another function of GAM7776 is therefore inhibition of Retinoblastoma binding protein 1 (RBBP1, Accession NP_075377.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RBBP1.

[53981] Retinoblastoma binding protein 9 (RBBP9, Accession NP_006597.2) is another GAM7776 target gene, herein designated TARGET GENE. RBBP9 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by RBBP9, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RBBP9

BINDING SITE, designated SEQ ID:16100, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53982] Another function of GAM7776 is therefore inhibition of Retinoblastoma binding protein 9 (RBBP9, Accession NP_006597.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RBBP9.

[53983] Retinoblastoma-like 2 (p130) (RBL2, Accession NP_005602.2) is another GAM7776 target gene, herein designated TARGET GENE. RBL2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RBL2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RBL2 BINDING SITE, designated SEQ ID:6615, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53984] Another function of GAM7776 is therefore inhibition of Retinoblastoma-like 2 (p130) (RBL2, Accession NP_005602.2), a gene which may be a tumor suppressor and therefore may be associated with Cancer. Accordingly,

utilities of GAM7776 include diagnosis, prevention and treatment of Cancer, and of other diseases and clinical conditions associated with RBL2.

[53985] The function of RBL2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1.RCBTB1 (Accession NP_060661.2) is another GAM7776 target gene, herein designated TARGET GENE. RCBTB1 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by RCBTB1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RCBTB1 BINDING SITE, designated SEQ ID:13829, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53986] Another function of GAM7776 is therefore inhibition of RCBTB1 (Accession NP_060661.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RCBTB1.

[53987] RCD-8 (Accession NP_055144.2) is another GAM7776 target gene, herein designated TARGET GENE. RCD-8 BIND-

ING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RCD-8, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RCD-8 BINDING SITE, designated SEQ ID:13335, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53988] Another function of GAM7776 is therefore inhibition of RCD-8 (Accession NP_055144.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RCD-8.

[53989] RDH13 (Accession NP_612421.1) is another GAM7776 target gene, herein designated TARGET GENE. RDH13 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by RDH13, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RDH13 BINDING SITE, designated SEQ ID:9713, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53990] Another function of GAM7776 is therefore inhibition of

RDH13 (Accession NP_612421.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RDH13.

[53991] Regulator of g-protein signalling 3 (RGS3, Accession NP_570613.1) is another GAM7776 target gene, herein designated TARGET GENE. RGS3 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by RGS3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RGS3 BINDING SITE, designated SEQ ID:3344, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53992] Another function of GAM7776 is therefore inhibition of Regulator of g-protein signalling 3 (RGS3, Accession NP_570613.1), a gene which negatively regulates G protein-coupled receptor signalling. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RGS3.

[53993] The function of RGS3 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM146.1.Rhesus blood group, d antigen (RHD, Accession NP_057208.2) is another GAM7776 target gene, herein designated TARGET GENE. RHD BINDING SITE1 and RHD BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by RHD, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RHD BINDING SITE1 and RHD BINDING SITE2, designated SEQ ID:13465 and SEQ ID:13465 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53994] Another function of GAM7776 is therefore inhibition of Rhesus blood group, d antigen (RHD, Accession NP_057208.2), a gene which Major antigen of the RH system. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RHD.

[53995] The function of RHD and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM161.1.Rhesus blood group, d antigen (RHD, Acces-

sion NP_057309.2) is another GAM7776 target gene, herein designated TARGET GENE. RHD BINDING SITE1 and RHD BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by RHD, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RHD BINDING SITE1 and RHD BINDING SITE2, designated SEQ ID:4143 and SEQ ID:4143 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53996] Another function of GAM7776 is therefore inhibition of Rhesus blood group, d antigen (RHD, Accession NP_057309.2), a gene which Major antigen of the RH system. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RHD.

[53997] The function of RHD and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM161.1.RHPN2 (Accession NP_149094.2) is another GAM7776 target gene, herein designated TARGET GENE. RHPN2 BINDING SITE is a target binding site found in the

3' untranslated region of mRNA encoded by RHPN2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RHPN2 BINDING SITE, designated SEQ ID:11803, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[53998] Another function of GAM7776 is therefore inhibition of RHPN2 (Accession NP_149094.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RHPN2.

[53999] RIP60 (Accession NP_037532.1) is another GAM7776 target gene, herein designated TARGET GENE. RIP60 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by RIP60, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RIP60 BINDING SITE, designated SEQ ID:5556, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54000] Another function of GAM7776 is therefore inhibition of RIP60 (Accession NP_037532.1) . Accordingly, utilities of

GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RIP60.

[54001] RIP60 (Accession NP_055189.1) is another GAM7776 target gene, herein designated TARGET GENE. RIP60 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by RIP60, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RIP60 BINDING SITE, designated SEQ ID:5556, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54002] Another function of GAM7776 is therefore inhibition of RIP60 (Accession NP_055189.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RIP60.

[54003] RNF137 (Accession NP_060543.4) is another GAM7776 target gene, herein designated TARGET GENE. RNF137 BINDING SITE1 and RNF137 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by RNF137, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the

nucleotide sequences of RNF137 BINDING SITE1 and RNF137 BINDING SITE2, designated SEQ ID:7446 and SEQ ID:16940 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54004] Another function of GAM7776 is therefore inhibition of RNF137 (Accession NP_060543.4) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RNF137.

[54005] RNF144 (Accession NP_055561.1) is another GAM7776 target gene, herein designated TARGET GENE. RNF144 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RNF144, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RNF144 BINDING SITE, designated SEQ ID:4727, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54006] Another function of GAM7776 is therefore inhibition of RNF144 (Accession NP_055561.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment

of diseases and clinical conditions associated with RNF144.

[54007] Ring finger protein (c3hc4 type) 8 (RNF8, Accession NP_003949.1) is another GAM7776 target gene, herein designated TARGET GENE. RNF8 BINDING SITE1 and RNF8 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by RNF8, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RNF8 BINDING SITE1 and RNF8 BINDING SITE2, designated SEQ ID:9745 and SEQ ID:13778 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54008] Another function of GAM7776 is therefore inhibition of Ring finger protein (c3hc4 type) 8 (RNF8, Accession NP_003949.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RNF8.

[54009] Retinitis pigmentosa 2 (x-linked recessive) (RP2, Accession NP_008846.1) is another GAM7776 target gene, herein designated TARGET GENE. RP2 BINDING SITE is a target binding site found in the 3' untranslated region of

mRNA encoded by RP2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RP2 BINDING SITE, designated SEQ ID:6582, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54010] Another function of GAM7776 is therefore inhibition of Retinitis pigmentosa 2 (x-linked recessive) (RP2, Accession NP_008846.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RP2.

[54011] Rabphilin 3a-like (without c2 domains) (RPH3AL, Accession NP_008918.1) is another GAM7776 target gene, herein designated TARGET GENE. RPH3AL BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RPH3AL, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RPH3AL BINDING SITE, designated SEQ ID:2614, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54012] Another function of GAM7776 is therefore inhibition of Rabphilin 3a-like (without c2 domains) (RPH3AL, Accession NP_008918.1), a gene which is a protein transporter. could play a role in neurotransmitter release by regulating membrane flow in the nerve terminal. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RPH3AL.

[54013] The function of RPH3AL and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1.RPP30 (Accession NP_006404.1) is another GAM7776 target gene, herein designated TARGET GENE. RPP30 BINDING SITE1 and RPP30 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by RPP30, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RPP30 BINDING SITE1 and RPP30 BINDING SITE2, designated SEQ ID:445 and SEQ ID:19325 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54014] Another function of GAM7776 is therefore inhibition of RPP30 (Accession NP_006404.1), a gene which is a component of ribonuclease p that processes 5' ends of precursor tRNAs. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RPP30.

[54015] The function of RPP30 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM136.1.S100A15 (Accession NP_789793.1) is another GAM7776 target gene, herein designated TARGET GENE. S100A15 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by S100A15, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of S100A15 BINDING SITE, designated SEQ ID:19723, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54016] Another function of GAM7776 is therefore inhibition of S100A15 (Accession NP_789793.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment

of diseases and clinical conditions associated with S100A15.

[54017] SARM1 (Accession NP_055892.1) is another GAM7776 target gene, herein designated TARGET GENE. SARM1 BINDING SITE1 and SARM1 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by SARM1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SARM1 BINDING SITE1 and SARM1 BINDING SITE2, designated SEQ ID:7147 and SEQ ID:4282 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54018] Another function of GAM7776 is therefore inhibition of SARM1 (Accession NP_055892.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SARM1.

[54019] Sarcoma amplified sequence (SAS, Accession NP_005972.1) is another GAM7776 target gene, herein designated TARGET GENE. SAS BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SAS, corresponding to a target binding site

such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SAS BINDING SITE, designated SEQ ID:17726, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54020] Another function of GAM7776 is therefore inhibition of Sarcoma amplified sequence (SAS, Accession NP_005972.1), a gene which is a member of the trans-membrane 4 superfamily (TM4SF) and may be involved in growth-related cellular processes T. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SAS.

[54021] The function of SAS and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM88.1.SBLF (Accession NP_006864.2) is another GAM7776 target gene, herein designated TARGET GENE. SBLF BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SBLF, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

SBLF BINDING SITE, designated SEQ ID:14551, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54022] Another function of GAM7776 is therefore inhibition of SBLF (Accession NP_006864.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SBLF.

[54023] SCAMP-4 (Accession NP_524558.1) is another GAM7776 target gene, herein designated TARGET GENE. SCAMP-4 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SCAMP-4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SCAMP-4 BINDING SITE, designated SEQ ID:2153, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54024] Another function of GAM7776 is therefore inhibition of SCAMP-4 (Accession NP_524558.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SCAMP-4.

[54025] Scan domain containing 2 (SCAND2, Accession

NP_071333.2) is another GAM7776 target gene, herein designated TARGET GENE. SCAND2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by SCAND2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SCAND2 BINDING SITE, designated SEQ ID:7179, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54026] Another function of GAM7776 is therefore inhibition of Scan domain containing 2 (SCAND2, Accession NP_071333.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SCAND2.

[54027] Scavenger receptor class f, member 1 (SCARF1, Accession NP_003684.1) is another GAM7776 target gene, herein designated TARGET GENE. SCARF1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SCARF1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SCARF1 BINDING

SITE, designated SEQ ID:5158, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54028] Another function of GAM7776 is therefore inhibition of Scavenger receptor class f, member 1 (SCARF1, Accession NP_003684.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SCARF1.

[54029] Stearoyl-coa desaturase (delta-9-desaturase) (SCD, Accession NP_005054.2) is another GAM7776 target gene, herein designated TARGET GENE. SCD BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SCD, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SCD BINDING SITE, designated SEQ ID:3800, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54030] Another function of GAM7776 is therefore inhibition of Stearoyl-coa desaturase (delta-9-desaturase) (SCD, Accession NP_005054.2), a gene which functions in the synthesis of unsaturated fatty acids. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SCD.

[54031] The function of SCD and its association with various dis-

eases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM144.1. Sex comb on midleg-like 2 (drosophila) (SCML2, Accession NP_006080.1) is another GAM7776 target gene, herein designated TARGET GENE. SCML2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SCML2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SCML2 BINDING SITE, designated SEQ ID:3898, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54032] Another function of GAM7776 is therefore inhibition of Sex comb on midleg-like 2 (drosophila) (SCML2, Accession NP_006080.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SCML2.

[54033] Sodium channel, voltage-gated, type ii, beta polypeptide (SCN2B, Accession NP_004579.1) is another GAM7776 target gene, herein designated TARGET GENE. SCN2B BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SCN2B, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SCN2B BINDING SITE, designated SEQ ID:13704, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54034] Another function of GAM7776 is therefore inhibition of Sodium channel, voltage-gated, type ii, beta polypeptide (SCN2B, Accession NP_004579.1), a gene which modulates channel properties. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SCN2B.

[54035] The function of SCN2B and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1.SCN3B (Accession NP_060870.1) is another GAM7776 target gene, herein designated TARGET GENE. SCN3B BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SCN3B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SCN3B BINDING SITE, designated SEQ ID:4399, to the

nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54036] Another function of GAM7776 is therefore inhibition of SCN3B (Accession NP_060870.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SCN3B.

[54037] SDS-RS1 (Accession NP_612441.1) is another GAM7776 target gene, herein designated TARGET GENE. SDS-RS1 BINDING SITE is a target binding site found in the 5` un-translated region of mRNA encoded by SDS-RS1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SDS-RS1 BINDING SITE, designated SEQ ID:14127, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54038] Another function of GAM7776 is therefore inhibition of SDS-RS1 (Accession NP_612441.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SDS-RS1.

[54039] Spondyloepiphyseal dysplasia, late (SEDL, Accession NP_055378.1) is another GAM7776 target gene, herein

designated TARGET GENE. SEDL BINDING SITE1 through SEDL BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by SEDL, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SEDL BINDING SITE1 through SEDL BINDING SITE3, designated SEQ ID:15576, SEQ ID:11591 and SEQ ID:926 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54040] Another function of GAM7776 is therefore inhibition of Spondyloepiphyseal dysplasia, late (SEDL, Accession NP_055378.1), a gene which may play role in vesicular transport from endoplasmic reticulum to golgi. and therefore may be associated with Spondyloepiphyseal dysplasia. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Spondyloepiphyseal dysplasia, and of other diseases and clinical conditions associated with SEDL.

[54041] The function of SEDL and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1.Sema domain, immunoglobulin domain (ig),

short basic domain, secreted, (semaphorin) 3e (SEMA3E, Accession NP_036563.1) is another GAM7776 target gene, herein designated TARGET GENE. SEMA3E BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SEMA3E, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SEMA3E BINDING SITE, designated SEQ ID:13353, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54042] Another function of GAM7776 is therefore inhibition of Sema domain, immunoglobulin domain (ig), short basic domain, secreted, (semaphorin) 3e (SEMA3E, Accession NP_036563.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SEMA3E.

[54043] Selenoprotein n, 1 (SEPN1, Accession NP_065184.1) is another GAM7776 target gene, herein designated TARGET GENE. SEPN1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SEPN1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4

illustrates the complementarity of the nucleotide sequences of SEPN1 BINDING SITE, designated SEQ ID:18255, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54044] Another function of GAM7776 is therefore inhibition of Selenoprotein n, 1 (SEPN1, Accession NP_065184.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SEPN1.

[54045] Small edrk-rich factor 1a (telomeric) (SERF1A, Accession NP_068802.1) is another GAM7776 target gene, herein designated TARGET GENE. SERF1A BINDING SITE1 and SERF1A BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by SERF1A, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SERF1A BINDING SITE1 and SERF1A BINDING SITE2, designated SEQ ID:15849 and SEQ ID:9219 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54046] Another function of GAM7776 is therefore inhibition of Small edrk-rich factor 1a (telomeric) (SERF1A, Accession

NP_068802.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SERF1A.

[54047] Small edrk-rich factor 1b (centromeric) (SERF1B, Accession NP_075267.1) is another GAM7776 target gene, herein designated TARGET GENE. SERF1B BINDING SITE1 and SERF1B BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by SERF1B, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SERF1B BINDING SITE1 and SERF1B BINDING SITE2, designated SEQ ID:9219 and SEQ ID:15849 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54048] Another function of GAM7776 is therefore inhibition of Small edrk-rich factor 1b (centromeric) (SERF1B, Accession NP_075267.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SERF1B.

[54049] Serine (or cysteine) proteinase inhibitor, clade b (ovalbumin), member 9 (SERPINB9, Accession NP_004146.1) is another GAM7776 target gene, herein

designated TARGET GENE. SERPINB9 BINDING SITE1 and SERPINB9 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by SERPINB9, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SERPINB9 BINDING SITE1 and SERPINB9 BINDING SITE2, designated SEQ ID:9152 and SEQ ID:4363 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54050] Another function of GAM7776 is therefore inhibition of Serine (or cysteine) proteinase inhibitor, clade b (ovalbumin), member 9 (SERPINB9, Accession NP_004146.1), a gene which may be a serpin serine protease inhibitor that interacts with granzyme B (GZMB). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SERPINB9.

[54051] The function of SERPINB9 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM88.2.Sideroflexin 2 (SFXN2, Accession XP_058359.2) is another GAM7776 target gene, herein

designated TARGET GENE. SFXN2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by SFXN2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SFXN2 BINDING SITE, designated SEQ ID:3678, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54052] Another function of GAM7776 is therefore inhibition of Sideroflexin 2 (SFXN2, Accession XP_058359.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SFXN2.

[54053] Sideroflexin 2 (SFXN2, Accession NP_849189.1) is another GAM7776 target gene, herein designated TARGET GENE. SFXN2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by SFXN2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SFXN2 BINDING SITE, designated SEQ ID:3678, to the nucleotide sequence of GAM7776

RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54054] Another function of GAM7776 is therefore inhibition of Sideroflexin 2 (SFXN2, Accession NP_849189.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SFXN2.

[54055] Sh3 domain binding glutamic acid-rich protein like 2 (SH3BGRL2, Accession NP_113657.1) is another GAM7776 target gene, herein designated TARGET GENE. SH3BGRL2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SH3BGRL2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SH3BGRL2 BINDING SITE, designated SEQ ID:2741, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54056] Another function of GAM7776 is therefore inhibition of Sh3 domain binding glutamic acid-rich protein like 2 (SH3BGRL2, Accession NP_113657.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

SH3BGR2.

[54057] Sh3-domain binding protein 2 (SH3BP2, Accession NP_003014.2) is another GAM7776 target gene, herein designated TARGET GENE. SH3BP2 BINDING SITE1 through SH3BP2 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by SH3BP2, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SH3BP2 BINDING SITE1 through SH3BP2 BINDING SITE3, designated SEQ ID:9440, SEQ ID:1122 and SEQ ID:3836 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54058] Another function of GAM7776 is therefore inhibition of Sh3-domain binding protein 2 (SH3BP2, Accession NP_003014.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SH3BP2.

[54059] Short stature homeobox (SHOX, Accession NP_006874.1) is another GAM7776 target gene, herein designated TARGET GENE. SHOX BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts

of mRNA encoded by SHOX, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SHOX BINDING SITE, designated SEQ ID:4375, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54060] Another function of GAM7776 is therefore inhibition of Short stature homeobox (SHOX, Accession NP_006874.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SHOX.

[54061] Sialic acid binding ig-like lectin 8 (SIGLEC8, Accession NP_055257.1) is another GAM7776 target gene, herein designated TARGET GENE. SIGLEC8 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SIGLEC8, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SIGLEC8 BINDING SITE, designated SEQ ID:4513, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54062] Another function of GAM7776 is therefore inhibition of Sialic acid binding ig-like lectin 8 (SIGLEC8, Accession NP_055257.1), a gene which is a cell adhesion molecule for postnatal neural development. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SIGLEC8.

[54063] The function of SIGLEC8 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM63.1.Tal1 (scl) interrupting locus (SIL, Accession NP_003026.1) is another GAM7776 target gene, herein designated TARGET GENE. SIL BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SIL, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SIL BINDING SITE, designated SEQ ID:12411, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54064] Another function of GAM7776 is therefore inhibition of Tal1 (scl) interrupting locus (SIL, Accession NP_003026.1), a gene which may be required for axial development and left-right specification and therefore may be associated

with Prominent midline neural tube defects, abnormal left- right development. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Prominent midline neural tube defects, abnormal left- right development, and of other diseases and clinical conditions associated with SIL.

[54065] The function of SIL and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1.Signal-regulatory protein beta 1 (SIRPB1, Accession NP_006056.1) is another GAM7776 target gene, herein designated TARGET GENE. SIRPB1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SIRPB1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SIRPB1 BINDING SITE, designated SEQ ID:14771, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54066] Another function of GAM7776 is therefore inhibition of Signal-regulatory protein beta 1 (SIRPB1, Accession NP_006056.1) . Accordingly, utilities of GAM7776 include

diagnosis, prevention and treatment of diseases and clinical conditions associated with SIRPB1.

[54067] Src-like-adaptor 2 (SLA2, Accession NP_778252.1) is another GAM7776 target gene, herein designated TARGET GENE. SLA2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by SLA2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLA2 BINDING SITE, designated SEQ ID:19573, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54068] Another function of GAM7776 is therefore inhibition of Src-like-adaptor 2 (SLA2, Accession NP_778252.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SLA2.

[54069] Src-like-adaptor 2 (SLA2, Accession NP_115590.1) is another GAM7776 target gene, herein designated TARGET GENE. SLA2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by SLA2, corresponding to a target bind-

ing site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLA2 BINDING SITE, designated SEQ ID:19573, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54070] Another function of GAM7776 is therefore inhibition of Src-like-adaptor 2 (SLA2, Accession NP_115590.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SLA2.

[54071] Solute carrier family 12 (potassium/chloride transporters), member 8 (SLC12A8, Accession NP_078904.1) is another GAM7776 target gene, herein designated TARGET GENE. SLC12A8 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SLC12A8, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC12A8 BINDING SITE, designated SEQ ID:5190, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54072] Another function of GAM7776 is therefore inhibition of

Solute carrier family 12 (potassium/chloride transporters), member 8 (SLC12A8, Accession NP_078904.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SLC12A8.

[54073] Solute carrier family 13 (sodium/sulfate symporters), member 1 (SLC13A1, Accession NP_071889.2) is another GAM7776 target gene, herein designated TARGET GENE. SLC13A1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SLC13A1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC13A1 BINDING SITE, designated SEQ ID:4370, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54074] Another function of GAM7776 is therefore inhibition of Solute carrier family 13 (sodium/sulfate symporters), member 1 (SLC13A1, Accession NP_071889.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SLC13A1.

[54075] Solute carrier family 14 (urea transporter), member 2

(SLC14A2, Accession NP_009094.2) is another GAM7776 target gene, herein designated TARGET GENE. SLC14A2 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by SLC14A2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC14A2 BINDING SITE, designated SEQ ID:4514, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54076] Another function of GAM7776 is therefore inhibition of Solute carrier family 14 (urea transporter), member 2 (SLC14A2, Accession NP_009094.2), a gene which is a renal urea transporter 2. and therefore may be associated with Orthostatic hypotension. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Orthostatic hypotension, and of other diseases and clinical conditions associated with SLC14A2.

[54077] The function of SLC14A2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM97.1.Solute carrier family 15 (oligopeptide transporter), member 1 (SLC15A1, Accession NP_005064.1) is

another GAM7776 target gene, herein designated TARGET GENE. SLC15A1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SLC15A1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC15A1 BINDING SITE, designated SEQ ID:18930, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54078] Another function of GAM7776 is therefore inhibition of Solute carrier family 15 (oligopeptide transporter), member 1 (SLC15A1, Accession NP_005064.1), a gene which is a H(+)- coupled peptide transporter. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SLC15A1.

[54079] The function of SLC15A1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1. Solute carrier family 16 (monocarboxylic acid transporters), member 4 (SLC16A4, Accession NP_004687.1) is another GAM7776 target gene, herein

designated TARGET GENE. SLC16A4 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SLC16A4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC16A4 BINDING SITE, designated SEQ ID:611, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54080] Another function of GAM7776 is therefore inhibition of Solute carrier family 16 (monocarboxylic acid transporters), member 4 (SLC16A4, Accession NP_004687.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SLC16A4.

[54081] Solute carrier family 19, member 3 (SLC19A3, Accession NP_079519.1) is another GAM7776 target gene, herein designated TARGET GENE. SLC19A3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SLC19A3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC19A3 BIND-

ING SITE, designated SEQ ID:6713, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54082] Another function of GAM7776 is therefore inhibition of Solute carrier family 19, member 3 (SLC19A3, Accession NP_079519.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SLC19A3.

[54083] Solute carrier family 1 (neutral amino acid transporter), member 5 (SLC1A5, Accession NP_005619.1) is another GAM7776 target gene, herein designated TARGET GENE. SLC1A5 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SLC1A5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC1A5 BINDING SITE, designated SEQ ID:1277, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54084] Another function of GAM7776 is therefore inhibition of Solute carrier family 1 (neutral amino acid transporter), member 5 (SLC1A5, Accession NP_005619.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention

and treatment of diseases and clinical conditions associated with SLC1A5.

[54085] Solute carrier family 24 (sodium/potassium/calcium exchanger), member 1 (SLC24A1, Accession NP_004718.1) is another GAM7776 target gene, herein designated TARGET GENE. SLC24A1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SLC24A1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC24A1 BINDING SITE, designated SEQ ID:10966, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54086] Another function of GAM7776 is therefore inhibition of Solute carrier family 24 (sodium/potassium/calcium exchanger), member 1 (SLC24A1, Accession NP_004718.1), a gene which is a critical component of the visual transduction cascade, controlling the calcium concentration of outer segments during light and darkness. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SLC24A1.

[54087] The function of SLC24A1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM130.1.SLC30A5 (Accession NP_076960.1) is another GAM7776 target gene, herein designated TARGET GENE. SLC30A5 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by SLC30A5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC30A5 BINDING SITE, designated SEQ ID:3692, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54088] Another function of GAM7776 is therefore inhibition of SLC30A5 (Accession NP_076960.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SLC30A5.

[54089] SLC30A6 (Accession NP_060434.2) is another GAM7776 target gene, herein designated TARGET GENE. SLC30A6 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SLC30A6, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC30A6 BINDING SITE, designated SEQ ID:5362, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54090] Another function of GAM7776 is therefore inhibition of SLC30A6 (Accession NP_060434.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SLC30A6.

[54091] SLC35E2 (Accession XP_049733.6) is another GAM7776 target gene, herein designated TARGET GENE. SLC35E2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SLC35E2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC35E2 BINDING SITE, designated SEQ ID:13336, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54092] Another function of GAM7776 is therefore inhibition of SLC35E2 (Accession XP_049733.6) . Accordingly, utilities

of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SLC35E2.

[54093] Solute carrier family 39 (zinc transporter), member 1 (SLC39A1, Accession NP_055252.2) is another GAM7776 target gene, herein designated TARGET GENE. SLC39A1 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by SLC39A1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC39A1 BINDING SITE, designated SEQ ID:9528, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54094] Another function of GAM7776 is therefore inhibition of Solute carrier family 39 (zinc transporter), member 1 (SLC39A1, Accession NP_055252.2), a gene which is a divalent (zinc/iron) metal ion transporter. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SLC39A1.

[54095] The function of SLC39A1 and its association with various diseases and clinical conditions, has been established by

previous studies, as described hereinabove with reference to GAM175.1. Solute carrier family 4, sodium bicarbonate transporter-like, member 11 (SLC4A11, Accession NP_114423.1) is another GAM7776 target gene, herein designated TARGET GENE. SLC4A11 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SLC4A11, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC4A11 BINDING SITE, designated SEQ ID:806, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54096] Another function of GAM7776 is therefore inhibition of Solute carrier family 4, sodium bicarbonate transporter-like, member 11 (SLC4A11, Accession NP_114423.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SLC4A11.

[54097] Solute carrier family 5 (sodium/glucose cotransporter), member 1 (SLC5A1, Accession NP_000334.1) is another GAM7776 target gene, herein designated TARGET GENE. SLC5A1 BINDING SITE is a target binding site found in the

3` untranslated region of mRNA encoded by SLC5A1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC5A1 BINDING SITE, designated SEQ ID:2571, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54098] Another function of GAM7776 is therefore inhibition of Solute carrier family 5 (sodium/glucose cotransporter), member 1 (SLC5A1, Accession NP_000334.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SLC5A1.

[54099] Solute carrier family 6 (neurotransmitter transporter), member 14 (SLC6A14, Accession NP_009162.1) is another GAM7776 target gene, herein designated TARGET GENE. SLC6A14 BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by SLC6A14, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC6A14 BINDING SITE, designated SEQ ID:13830, to the nucleotide sequence of GAM7776 RNA,

herein designated GAM RNA, also designated SEQ ID:246.

[54100] Another function of GAM7776 is therefore inhibition of Solute carrier family 6 (neurotransmitter transporter), member 14 (SLC6A14, Accession NP_009162.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SLC6A14.

[54101] Solute carrier family 6 (neurotransmitter transporter, dopamine), member 3 (SLC6A3, Accession NP_001035.1) is another GAM7776 target gene, herein designated TARGET GENE. SLC6A3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SLC6A3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC6A3 BINDING SITE, designated SEQ ID:12941, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54102] Another function of GAM7776 is therefore inhibition of Solute carrier family 6 (neurotransmitter transporter, dopamine), member 3 (SLC6A3, Accession NP_001035.1), a gene which terminates the action of dopamine by its

high affinity sodium- dependent reuptake into presynaptic terminals. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SLC6A3.

[54103] The function of SLC6A3 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1.SMAC (Accession NP_620308.1) is another GAM7776 target gene, herein designated TARGET GENE. SMAC BINDING SITE1 and SMAC BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by SMAC, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SMAC BINDING SITE1 and SMAC BINDING SITE2, designated SEQ ID:1861 and SEQ ID:18165 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54104] Another function of GAM7776 is therefore inhibition of SMAC (Accession NP_620308.1), a gene which promotes apoptosis via caspase activation. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of

diseases and clinical conditions associated with SMAC.

[54105] The function of SMAC and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM136.1. Synaptosomal-associated protein, 23kda (SNAP23, Accession NP_570710.1) is another GAM7776 target gene, herein designated TARGET GENE. SNAP23 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by SNAP23, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SNAP23 BINDING SITE, designated SEQ ID:19007, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54106] Another function of GAM7776 is therefore inhibition of Synaptosomal-associated protein, 23kda (SNAP23, Accession NP_570710.1), a gene which is essential component of the high affinity receptor for the general membrane fusion machinery. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SNAP23.

[54107] The function of SNAP23 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1.Synaptosomal-associated protein, 23kda (SNAP23, Accession NP_003816.2) is another GAM7776 target gene, herein designated TARGET GENE. SNAP23 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by SNAP23, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SNAP23 BINDING SITE, designated SEQ ID:19007, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54108] Another function of GAM7776 is therefore inhibition of Synaptosomal-associated protein, 23kda (SNAP23, Accession NP_003816.2), a gene which is essential component of the high affinity receptor for the general membrane fusion machinery. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SNAP23.

[54109] The function of SNAP23 and its association with various

diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1.SNARK (Accession NP_112214.1) is another GAM7776 target gene, herein designated TARGET GENE. SNARK BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SNARK, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SNARK BINDING SITE, designated SEQ ID:18622, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54110] Another function of GAM7776 is therefore inhibition of SNARK (Accession NP_112214.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SNARK.

[54111] Syntaphilin (SNPH, Accession NP_055538.1) is another GAM7776 target gene, herein designated TARGET GENE. SNPH BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SNPH, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

SNPH BINDING SITE, designated SEQ ID:15041, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54112] Another function of GAM7776 is therefore inhibition of Syntaphilin (SNPH, Accession NP_055538.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SNPH.

[54113] Sorting nexin 15 (SNX15, Accession NP_037438.2) is another GAM7776 target gene, herein designated TARGET GENE. SNX15 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by SNX15, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SNX15 BINDING SITE, designated SEQ ID:7625, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54114] Another function of GAM7776 is therefore inhibition of Sorting nexin 15 (SNX15, Accession NP_037438.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions as-

sociated with SNX15.

[54115] Sorting nexin 15 (SNX15, Accession NP_680086.1) is another GAM7776 target gene, herein designated TARGET GENE. SNX15 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by SNX15, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SNX15 BINDING SITE, designated SEQ ID:7625, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54116] Another function of GAM7776 is therefore inhibition of Sorting nexin 15 (SNX15, Accession NP_680086.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SNX15.

[54117] SNX22 (Accession NP_079074.1) is another GAM7776 target gene, herein designated TARGET GENE. SNX22 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SNX22, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the

complementarity of the nucleotide sequences of SNX22 BINDING SITE, designated SEQ ID:13596, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54118] Another function of GAM7776 is therefore inhibition of SNX22 (Accession NP_079074.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SNX22.

[54119] SNX27 (Accession NP_112180.4) is another GAM7776 target gene, herein designated TARGET GENE. SNX27 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SNX27, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SNX27 BINDING SITE, designated SEQ ID:16941, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54120] Another function of GAM7776 is therefore inhibition of SNX27 (Accession NP_112180.4) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SNX27.

[54121] Sialophorin (gp115, leukosialin, cd43) (SPN, Accession

NP_003114.1) is another GAM7776 target gene, herein designated TARGET GENE. SPN BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SPN, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SPN BINDING SITE, designated SEQ ID:16209, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54122] Another function of GAM7776 is therefore inhibition of Sialophorin (gpl115, leukosialin, cd43) (SPN, Accession NP_003114.1), a gene which plays a role in the physico-chemical properties of the t- cell surface and in lectin binding. presents carbohydrate ligands to selectins. . and therefore may be associated with Wiskott- aldrich syndrome. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Wiskott- aldrich syndrome, and of other diseases and clinical conditions associated with SPN.

[54123] The function of SPN and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM130.1. Speckle-type poz protein (SPOP, Accession NP_003554.1) is another GAM7776 target gene, herein designated TARGET GENE. SPOP BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by SPOP, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SPOP BINDING SITE, designated SEQ ID:5610, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54124] Another function of GAM7776 is therefore inhibition of Speckle-type poz protein (SPOP, Accession NP_003554.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SPOP.

[54125] SQV7L (Accession XP_047287.1) is another GAM7776 target gene, herein designated TARGET GENE. SQV7L BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by SQV7L, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SQV7L

BINDING SITE, designated SEQ ID:7375, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54126] Another function of GAM7776 is therefore inhibition of SQV7L (Accession XP_047287.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SQV7L.

[54127] Sarcalumenin (SRL, Accession XP_064152.3) is another GAM7776 target gene, herein designated TARGET GENE. SRL BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by SRL, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SRL BINDING SITE, designated SEQ ID:6681, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54128] Another function of GAM7776 is therefore inhibition of Sarcalumenin (SRL, Accession XP_064152.3) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SRL.

[54129] Serine/arginine repetitive matrix 2 (SRRM2, Accession

NP_057417.2) is another GAM7776 target gene, herein designated TARGET GENE. SRRM2 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by SRRM2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SRRM2 BINDING SITE, designated SEQ ID:18975, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54130] Another function of GAM7776 is therefore inhibition of Serine/arginine repetitive matrix 2 (SRRM2, Accession NP_057417.2), a gene which RELATED NUCLEAR MATRIX PROTEIN. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SRRM2.

[54131] The function of SRRM2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1. Synovial sarcoma translocation, chromosome 18 (SS18, Accession NP_005628.1) is another GAM7776 target gene, herein designated TARGET GENE. SS18 BINDING SITE is a target binding site found in the 3'

untranslated region of mRNA encoded by SS18, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SS18 BINDING SITE, designated SEQ ID:17762, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54132] Another function of GAM7776 is therefore inhibition of Synovial sarcoma translocation, chromosome 18 (SS18, Accession NP_005628.1), a gene which is a putative transcriptional activator. and therefore is associated with Human synovial sarcomas. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Human synovial sarcomas., and of other diseases and clinical conditions associated with SS18.

[54133] The function of SS18 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM130.1.STAF65(gamma) (Accession NP_055675.1) is another GAM7776 target gene, herein designated TARGET GENE. STAF65(gamma) BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by STAF65(gamma), corresponding to a target binding site

such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of STAF65(gamma) BINDING SITE, designated SEQ ID:2196, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54134] Another function of GAM7776 is therefore inhibition of STAF65(gamma) (Accession NP_055675.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with STAF65(gamma).

[54135] Staufen, rna binding protein (drosophila) (STAU, Accession NP_004593.1) is another GAM7776 target gene, herein designated TARGET GENE. STAU BINDING SITE is a target binding site found in the 5` untranslated region of multiple transcripts of mRNA encoded by STAU, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of STAU BINDING SITE, designated SEQ ID:3950, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54136] Another function of GAM7776 is therefore inhibition of

Staufen, rna binding protein (drosophila) (STAU, Accession NP_004593.1), a gene which may play a role in specific positioning of mrnas at given sites in the cell and in stimulating their translation at the site. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with STAU.

[54137] The function of STAU and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM37.1.Sulfotransferase, estrogen-preferring (STE, Accession NP_005411.1) is another GAM7776 target gene, herein designated TARGET GENE. STE BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by STE, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of STE BINDING SITE, designated SEQ ID:3303, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54138] Another function of GAM7776 is therefore inhibition of Sulfotransferase, estrogen-preferring (STE, Accession NP_005411.1), a gene which sulfates estrone and dehy-

droepiandrosterone, but not dopamine. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with STE.

[54139] The function of STE and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1. Six transmembrane epithelial antigen of prostate 2 (STEAP2, Accession NP_694544.1) is another GAM7776 target gene, herein designated TARGET GENE. STEAP2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by STEAP2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of STEAP2 BINDING SITE, designated SEQ ID:9147, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54140] Another function of GAM7776 is therefore inhibition of Six transmembrane epithelial antigen of prostate 2 (STEAP2, Accession NP_694544.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

STEAP2.

[54141] Stomatin (STOM, Accession NP_004090.3) is another GAM7776 target gene, herein designated TARGET GENE. STOM BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by STOM, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of STOM BINDING SITE, designated SEQ ID:2907, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54142] Another function of GAM7776 is therefore inhibition of Stomatin (STOM, Accession NP_004090.3) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with STOM.

[54143] Syntaxin 12 (STX12, Accession NP_803173.1) is another GAM7776 target gene, herein designated TARGET GENE. STX12 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by STX12, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences

of STX12 BINDING SITE, designated SEQ ID:12575, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54144] Another function of GAM7776 is therefore inhibition of Syntaxin 12 (STX12, Accession NP_803173.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with STX12.

[54145] Synaptotagmin xi (SYT11, Accession NP_689493.2) is another GAM7776 target gene, herein designated TARGET GENE. SYT11 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SYT11, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SYT11 BINDING SITE, designated SEQ ID:9033, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54146] Another function of GAM7776 is therefore inhibition of Synaptotagmin xi (SYT11, Accession NP_689493.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SYT11.

[54147] Synaptotagmin xiii (SYT13, Accession NP_065877.1) is another GAM7776 target gene, herein designated TARGET GENE. SYT13 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SYT13, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SYT13 BINDING SITE, designated SEQ ID:15294, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54148] Another function of GAM7776 is therefore inhibition of Synaptotagmin xiii (SYT13, Accession NP_065877.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SYT13.

[54149] TADA3L (Accession NP_597814.1) is another GAM7776 target gene, herein designated TARGET GENE. TADA3L BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by TADA3L, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TADA3L BINDING SITE, designated

SEQ ID:9087, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54150] Another function of GAM7776 is therefore inhibition of TADA3L (Accession NP_597814.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TADA3L.

[54151] T-cell acute lymphocytic leukemia 1 (TAL1, Accession NP_003180.1) is another GAM7776 target gene, herein designated TARGET GENE. TAL1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TAL1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TAL1 BINDING SITE, designated SEQ ID:18260, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54152] Another function of GAM7776 is therefore inhibition of T-cell acute lymphocytic leukemia 1 (TAL1, Accession NP_003180.1), a gene which may help control cell growth and differentiation. Accordingly, utilities of GAM7776 in-

clude diagnosis, prevention and treatment of diseases and clinical conditions associated with TAL1.

[54153] The function of TAL1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1. Tap binding protein (tapasin) (TAPBP, Accession NP_003181.3) is another GAM7776 target gene, herein designated TARGET GENE. TAPBP BINDING SITE1 through TAPBP BINDING SITE3 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by TAPBP, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TAPBP BINDING SITE1 through TAPBP BINDING SITE3, designated SEQ ID:16940, SEQ ID:11523 and SEQ ID:12247 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54154] Another function of GAM7776 is therefore inhibition of Tap binding protein (tapasin) (TAPBP, Accession NP_003181.3), a gene which is involved in MHC class I-restricted antigen processing. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of

diseases and clinical conditions associated with TAPBP.

[54155] The function of TAPBP and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM136.1. Tyrosine aminotransferase (TAT, Accession NP_000344.1) is another GAM7776 target gene, herein designated TARGET GENE. TAT BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TAT, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TAT BINDING SITE, designated SEQ ID:18942, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54156] Another function of GAM7776 is therefore inhibition of Tyrosine aminotransferase (TAT, Accession NP_000344.1), a gene which is tyrosine aminotransferase and strongly similar to rat Rn.9947, which plays a role in gluconeogenesis. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TAT.

[54157] The function of TAT and its association with various dis-

eases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1.Tbc1 domain family, member 5 (TBC1D5, Accession NP_055559.1) is another GAM7776 target gene, herein designated TARGET GENE. TBC1D5 BINDING SITE1 and TBC1D5 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by TBC1D5, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TBC1D5 BINDING SITE1 and TBC1D5 BINDING SITE2, designated SEQ ID:16449 and SEQ ID:14859 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54158] Another function of GAM7776 is therefore inhibition of Tbc1 domain family, member 5 (TBC1D5, Accession NP_055559.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TBC1D5.

[54159] T-box 3 (ulnar mammary syndrome) (TBX3, Accession NP_005987.2) is another GAM7776 target gene, herein designated TARGET GENE. TBX3 BINDING SITE is a target binding site found in the 5' untranslated region of multi-

ple transcripts of mRNA encoded by TBX3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TBX3 BINDING SITE, designated SEQ ID:19690, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54160] Another function of GAM7776 is therefore inhibition of T-box 3 (ulnar mammary syndrome) (TBX3, Accession NP_005987.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TBX3.

[54161] T-box 3 (ulnar mammary syndrome) (TBX3, Accession NP_057653.2) is another GAM7776 target gene, herein designated TARGET GENE. TBX3 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by TBX3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TBX3 BINDING SITE, designated SEQ ID:19690, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54162] Another function of GAM7776 is therefore inhibition of T-box 3 (ulnar mammary syndrome) (TBX3, Accession NP_057653.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TBX3.

[54163] Transcription factor 2, hepatic; If-b3; variant hepatic nuclear factor (TCF2, Accession NP_006472.1) is another GAM7776 target gene, herein designated TARGET GENE. TCF2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by TCF2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TCF2 BINDING SITE, designated SEQ ID:625, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54164] Another function of GAM7776 is therefore inhibition of Transcription factor 2, hepatic; If-b3; variant hepatic nuclear factor (TCF2, Accession NP_006472.1), a gene which probably binds to the inverted palindrome 5'- gttaatnat-taac- 3'. and therefore is associated with Maturity-onset diabetes of the young type 5 (mody5), familial hypoplastic glomerulocystic kidney disease (gckd). Accordingly, utili-

ties of GAM7776 include diagnosis, prevention and treatment of Maturity-onset diabetes of the young type 5 (mody5), familial hypoplastic glomerulocystic kidney disease (gckd), and of other diseases and clinical conditions associated with TCF2.

[54165] The function of TCF2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM144.1.T-cell leukemia/lymphoma 6 (TCL6, Accession NP_065575.1) is another GAM7776 target gene, herein designated TARGET GENE. TCL6 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by TCL6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TCL6 BINDING SITE, designated SEQ ID:17450, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54166] Another function of GAM7776 is therefore inhibition of T-cell leukemia/lymphoma 6 (TCL6, Accession NP_065575.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical

cal conditions associated with TCL6.

[54167] T-cell leukemia/lymphoma 6 (TCL6, Accession NP_036600.2) is another GAM7776 target gene, herein designated TARGET GENE. TCL6 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by TCL6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TCL6 BINDING SITE, designated SEQ ID:17450, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54168] Another function of GAM7776 is therefore inhibition of T-cell leukemia/lymphoma 6 (TCL6, Accession NP_036600.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TCL6.

[54169] T-cell leukemia/lymphoma 6 (TCL6, Accession NP_055233.1) is another GAM7776 target gene, herein designated TARGET GENE. TCL6 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by TCL6, corresponding to a target binding site such as BINDING SITE I, BINDING

SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TCL6 BINDING SITE, designated SEQ ID:17450, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54170] Another function of GAM7776 is therefore inhibition of T-cell leukemia/lymphoma 6 (TCL6, Accession NP_055233.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TCL6.

[54171] T-cell leukemia/lymphoma 6 (TCL6, Accession NP_065577.2) is another GAM7776 target gene, herein designated TARGET GENE. TCL6 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by TCL6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TCL6 BINDING SITE, designated SEQ ID:17450, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54172] Another function of GAM7776 is therefore inhibition of T-cell leukemia/lymphoma 6 (TCL6, Accession

NP_065577.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TCL6.

[54173] Teratocarcinoma-derived growth factor 1 (TDGF1, Accession NP_003203.1) is another GAM7776 target gene, herein designated TARGET GENE. TDGF1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TDGF1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TDGF1 BINDING SITE, designated SEQ ID:8563, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54174] Another function of GAM7776 is therefore inhibition of Teratocarcinoma-derived growth factor 1 (TDGF1, Accession NP_003203.1), a gene which can play a role in the determination of the epiblastic cells that subsequently give rise to the mesoderm. and therefore may be associated with Forebrain defects. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Forebrain defects, and of other diseases and clinical conditions associated with TDGF1.

[54175] The function of TDGF1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1.TERA (Accession NP_067061.1) is another GAM7776 target gene, herein designated TARGET GENE. TERA BINDING SITE1 and TERA BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by TERA, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TERA BINDING SITE1 and TERA BINDING SITE2, designated SEQ ID:14491 and SEQ ID:17755 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54176] Another function of GAM7776 is therefore inhibition of TERA (Accession NP_067061.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TERA.

[54177] Telomeric repeat binding factor (nima-interacting) 1 (TERF1, Accession NP_003209.1) is another GAM7776 target gene, herein designated TARGET GENE. TERF1 BINDING SITE is a target binding site found in the 3` untranslated

lated region of multiple transcripts of mRNA encoded by TERF1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TERF1 BINDING SITE, designated SEQ ID:1745, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54178] Another function of GAM7776 is therefore inhibition of Telomeric repeat binding factor (nima-interacting) 1 (TERF1, Accession NP_003209.1), a gene which negatively regulates telomere length, involves in regulation of the mitotic spindle. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TERF1.

[54179] The function of TERF1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1. Telomeric repeat binding factor (nima-interacting) 1 (TERF1, Accession NP_059523.1) is another GAM7776 target gene, herein designated TARGET GENE. TERF1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of

mRNA encoded by TERF1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TERF1 BINDING SITE, designated SEQ ID:1745, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54180] Another function of GAM7776 is therefore inhibition of Telomeric repeat binding factor (nima-interacting) 1 (TERF1, Accession NP_059523.1), a gene which negatively regulates telomere length, involves in regulation of the mitotic spindle. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TERF1.

[54181] The function of TERF1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1. Telomeric repeat binding factor 2 (TERF2, Accession NP_005643.1) is another GAM7776 target gene, herein designated TARGET GENE. TERF2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TERF2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BIND-

ING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TERF2 BINDING SITE, designated SEQ ID:1744, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54182] Another function of GAM7776 is therefore inhibition of Telomeric repeat binding factor 2 (TERF2, Accession NP_005643.1), a gene which plays a key role in the protective activity of telomeres. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TERF2.

[54183] The function of TERF2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM133.2. Tgfb-induced factor 2 (tale family homeobox) (TGIF2, Accession NP_068581.1) is another GAM7776 target gene, herein designated TARGET GENE. TGIF2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TGIF2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TGIF2 BINDING SITE, designated SEQ ID:6881, to the nu-

cleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54184] Another function of GAM7776 is therefore inhibition of Tgfb-induced factor 2 (tale family homeobox) (TGIF2, Accession NP_068581.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TGIF2.

[54185] Tigger transposable element derived 6 (TIGD6, Accession NP_112215.1) is another GAM7776 target gene, herein designated TARGET GENE. TIGD6 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TIGD6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TIGD6 BINDING SITE, designated SEQ ID:4933, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54186] Another function of GAM7776 is therefore inhibition of Tigger transposable element derived 6 (TIGD6, Accession NP_112215.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TIGD6.

[54187] TIM50L (Accession XP_053074.2) is another GAM7776 target gene, herein designated TARGET GENE. TIM50L BINDING SITE1 and TIM50L BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by TIM50L, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TIM50L BINDING SITE1 and TIM50L BINDING SITE2, designated SEQ ID:5989 and SEQ ID:10157 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54188] Another function of GAM7776 is therefore inhibition of TIM50L (Accession XP_053074.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TIM50L.

[54189] Torsionless-like kinase 1 (TLK1, Accession NP_036422.2) is another GAM7776 target gene, herein designated TARGET GENE. TLK1 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by TLK1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide se-

quences of TLK1 BINDING SITE, designated SEQ ID:6551, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54190] Another function of GAM7776 is therefore inhibition of Toslled-like kinase 1 (TLK1, Accession NP_036422.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TLK1.

[54191] Toll-like receptor 5 (TLR5, Accession NP_003259.2) is another GAM7776 target gene, herein designated TARGET GENE. TLR5 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by TLR5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TLR5 BINDING SITE, designated SEQ ID:16229, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54192] Another function of GAM7776 is therefore inhibition of Toll-like receptor 5 (TLR5, Accession NP_003259.2), a gene which participates in the innate immune response to bacterial flagellins. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and

clinical conditions associated with TLR5.

[54193] The function of TLR5 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM40.1. Transmembrane, cochlear expressed, 1 (TMC1, Accession NP_619636.2) is another GAM7776 target gene, herein designated TARGET GENE. TMC1 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by TMC1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TMC1 BINDING SITE, designated SEQ ID:2152, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54194] Another function of GAM7776 is therefore inhibition of Transmembrane, cochlear expressed, 1 (TMC1, Accession NP_619636.2), a gene which is required for normal function of cochlear hair cells and therefore may be associated with Autosomal recessive nonsyndromic neurosensory deafness and autosomal dominant nonsyndromic sensorineural hearing loss . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Autosomal

recessive nonsyndromic neurosensory deafness and autosomal dominant nonsyndromic sensorineural hearing loss, and of other diseases and clinical conditions associated with TMC1.

[54195] The function of TMC1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM136.1.TMEM14A (Accession NP_054770.1) is another GAM7776 target gene, herein designated TARGET GENE. TMEM14A BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by TMEM14A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TMEM14A BINDING SITE, designated SEQ ID:5271, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54196] Another function of GAM7776 is therefore inhibition of TMEM14A (Accession NP_054770.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TMEM14A.

[54197] Transmembrane protease, serine 3 (TMPRSS3, Accession NP_076927.1) is another GAM7776 target gene, herein designated TARGET GENE. TMPRSS3 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by TMPRSS3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TMPRSS3 BINDING SITE, designated SEQ ID:6625, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54198] Another function of GAM7776 is therefore inhibition of Transmembrane protease, serine 3 (TMPRSS3, Accession NP_076927.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TMPRSS3.

[54199] Transmembrane protease, serine 3 (TMPRSS3, Accession NP_115777.1) is another GAM7776 target gene, herein designated TARGET GENE. TMPRSS3 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by TMPRSS3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of TMPRSS3 BINDING SITE, designated SEQ ID:6625, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54200] Another function of GAM7776 is therefore inhibition of Transmembrane protease, serine 3 (TMPRSS3, Accession NP_115777.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TMPRSS3.

[54201] Transmembrane protease, serine 3 (TMPRSS3, Accession NP_115780.1) is another GAM7776 target gene, herein designated TARGET GENE. TMPRSS3 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by TMPRSS3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TMPRSS3 BINDING SITE, designated SEQ ID:6625, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54202] Another function of GAM7776 is therefore inhibition of Transmembrane protease, serine 3 (TMPRSS3, Accession NP_115780.1) . Accordingly, utilities of GAM7776 include

diagnosis, prevention and treatment of diseases and clinical conditions associated with TMPRSS3.

[54203] Tumor necrosis factor, alpha-induced protein 2 (TNFAIP2, Accession NP_006282.2) is another GAM7776 target gene, herein designated TARGET GENE. TNFAIP2 BINDING SITE1 and TNFAIP2 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by TNFAIP2, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TNFAIP2 BINDING SITE1 and TNFAIP2 BINDING SITE2, designated SEQ ID:13948 and SEQ ID:17621 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54204] Another function of GAM7776 is therefore inhibition of Tumor necrosis factor, alpha-induced protein 2 (TNFAIP2, Accession NP_006282.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TNFAIP2.

[54205] Tumor necrosis factor receptor superfamily, member 10b (TNFRSF10B, Accession NP_003833.3) is another GAM7776 target gene, herein designated TARGET GENE. TNFRSF10B BINDING SITE1 and TNFRSF10B BINDING SITE2

are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by TNFRSF10B, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TNFRSF10B BINDING SITE1 and TNFRSF10B BINDING SITE2, designated SEQ ID:4398 and SEQ ID:4398 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54206] Another function of GAM7776 is therefore inhibition of Tumor necrosis factor receptor superfamily, member 10b (TNFRSF10B, Accession NP_003833.3), a gene which forms complex that induces apoptosis. and therefore may be associated with Squamous cell carcinoma . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Squamous cell carcinoma ., and of other diseases and clinical conditions associated with TNFRSF10B.

[54207] The function of TNFRSF10B and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1.Tumor necrosis factor receptor superfamily, member 10b (TNFRSF10B, Accession NP_003833.3) is another GAM7776 target gene, herein designated TAR-

GET GENE. TNFRSF10B BINDING SITE1 and TNFRSF10B BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by TNFRSF10B, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TNFRSF10B BINDING SITE1 and TNFRSF10B BINDING SITE2, designated SEQ ID:15107 and SEQ ID:15107 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54208] Another function of GAM7776 is therefore inhibition of Tumor necrosis factor receptor superfamily, member 10b (TNFRSF10B, Accession NP_003833.3), a gene which forms complex that induces apoptosis. and therefore may be associated with Squamous cell carcinoma . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Squamous cell carcinoma ., and of other diseases and clinical conditions associated with TNFRSF10B.

[54209] The function of TNFRSF10B and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1.Tumor necrosis factor receptor super-

family, member 11a, activator of nfkb (TNFRSF11A, Accession NP_003830.1) is another GAM7776 target gene, herein designated TARGET GENE. TNFRSF11A BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TNFRSF11A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TNFRSF11A BINDING SITE, designated SEQ ID:2200, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54210] Another function of GAM7776 is therefore inhibition of Tumor necrosis factor receptor superfamily, member 11a, activator of nfkb (TNFRSF11A, Accession NP_003830.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TNFRSF11A.

[54211] Tumor necrosis factor receptor superfamily, member 21 (TNFRSF21, Accession NP_055267.1) is another GAM7776 target gene, herein designated TARGET GENE. TNFRSF21 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TNFRSF21, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TNFRSF21 BINDING SITE, designated SEQ ID:16759, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54212] Another function of GAM7776 is therefore inhibition of Tumor necrosis factor receptor superfamily, member 21 (TNFRSF21, Accession NP_055267.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TNFRSF21.

[54213] Tumor necrosis factor receptor superfamily, member 9 (TNFRSF9, Accession NP_001552.2) is another GAM7776 target gene, herein designated TARGET GENE. TNFRSF9 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TNFRSF9, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TNFRSF9 BINDING SITE, designated SEQ ID:13464, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54214] Another function of GAM7776 is therefore inhibition of

Tumor necrosis factor receptor superfamily, member 9 (TNFRSF9, Accession NP_001552.2), a gene which inhibits proliferation of activated T lymphocytes. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TNFRSF9.

[54215] The function of TNFRSF9 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1. Tensin (TNS, Accession NP_072174.2) is another GAM7776 target gene, herein designated TARGET GENE. TNS BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TNS, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TNS BINDING SITE, designated SEQ ID:8787, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54216] Another function of GAM7776 is therefore inhibition of Tensin (TNS, Accession NP_072174.2). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

TNS.

[54217] TOLLIP (Accession NP_061882.2) is another GAM7776 target gene, herein designated TARGET GENE. TOLLIP BINDING SITE1 and TOLLIP BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by TOLLIP, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TOLLIP BINDING SITE1 and TOLLIP BINDING SITE2, designated SEQ ID:13694 and SEQ ID:3306 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54218] Another function of GAM7776 is therefore inhibition of TOLLIP (Accession NP_061882.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TOLLIP.

[54219] Topoisomerase (dna) iii beta (TOP3B, Accession NP_003926.1) is another GAM7776 target gene, herein designated TARGET GENE. TOP3B BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TOP3B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III

of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TOP3B BINDING SITE, designated SEQ ID:4495, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54220] Another function of GAM7776 is therefore inhibition of Topoisomerase (dna) iii beta (TOP3B, Accession NP_003926.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TOP3B.

[54221] Torsin family 1, member b (torsin b) (TOR1B, Accession NP_055321.1) is another GAM7776 target gene, herein designated TARGET GENE. TOR1B BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TOR1B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TOR1B BINDING SITE, designated SEQ ID:14221, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54222] Another function of GAM7776 is therefore inhibition of Torsin family 1, member b (torsin b) (TOR1B, Accession

NP_055321.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TOR1B.

[54223] TOSO (Accession NP_005440.1) is another GAM7776 target gene, herein designated TARGET GENE. TOSO BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TOSO, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TOSO BINDING SITE, designated SEQ ID:5682, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54224] Another function of GAM7776 is therefore inhibition of TOSO (Accession NP_005440.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TOSO.

[54225] Tumor protein p53 (li-fraumeni syndrome) (TP53, Accession NP_000537.2) is another GAM7776 target gene, herein designated TARGET GENE. TP53 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TP53, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BIND-

ING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TP53 BINDING SITE, designated SEQ ID:4654, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54226] Another function of GAM7776 is therefore inhibition of Tumor protein p53 (li-fraumeni syndrome) (TP53, Accession NP_000537.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TP53.

[54227] TP53I11 (Accession XP_029347.6) is another GAM7776 target gene, herein designated TARGET GENE. TP53I11 BINDING SITE is a target binding site found in the 5` untranslated region of multiple transcripts of mRNA encoded by TP53I11, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TP53I11 BINDING SITE, designated SEQ ID:14987, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54228] Another function of GAM7776 is therefore inhibition of TP53I11 (Accession XP_029347.6) . Accordingly, utilities

of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TP53I11.

[54229] Thiopurine s-methyltransferase (TPMT, Accession NP_000358.1) is another GAM7776 target gene, herein designated TARGET GENE. TPMT BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TPMT, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TPMT BINDING SITE, designated SEQ ID:19670, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54230] Another function of GAM7776 is therefore inhibition of Thiopurine s-methyltransferase (TPMT, Accession NP_000358.1), a gene which catalyzes the s- methylation of thiopurine drugs such as 6- mercaptopurine. and therefore may be associated with Thiopurine s- methyltransferase polymorphism. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Thiopurine s- methyltransferase polymorphism, and of other diseases and clinical conditions associated with

TPMT.

[54231] The function of TPMT and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM130.1. Tnf receptor-associated factor 5 (TRAF5, Accession NP_665702.1) is another GAM7776 target gene, herein designated TARGET GENE. TRAF5 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by TRAF5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TRAF5 BINDING SITE, designated SEQ ID:7045, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54232] Another function of GAM7776 is therefore inhibition of Tnf receptor-associated factor 5 (TRAF5, Accession NP_665702.1), a gene which Member of a family of proteins that interact with TNF receptors; binds the lymphotoxin beta receptor (LTBR). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TRAF5.

[54233] The function of TRAF5 and its association with various

diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM69.2. Tnf receptor-associated factor 5 (TRAF5, Accession NP_004610.1) is another GAM7776 target gene, herein designated TARGET GENE. TRAF5 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by TRAF5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TRAF5 BINDING SITE, designated SEQ ID:7045, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54234] Another function of GAM7776 is therefore inhibition of Tnf receptor-associated factor 5 (TRAF5, Accession NP_004610.1), a gene which Member of a family of proteins that interact with TNF receptors; binds the lymphotoxin beta receptor (LTBR). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TRAF5.

[54235] The function of TRAF5 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM69.2.Tripartite motif-containing 16 (TRIM16, Accession NP_006461.2) is another GAM7776 target gene, herein designated TARGET GENE. TRIM16 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TRIM16, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TRIM16 BINDING SITE, designated SEQ ID:4601, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54236] Another function of GAM7776 is therefore inhibition of Tripartite motif-containing 16 (TRIM16, Accession NP_006461.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TRIM16.

[54237] Tripartite motif-containing 5 (TRIM5, Accession NP_149023.1) is another GAM7776 target gene, herein designated TARGET GENE. TRIM5 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by TRIM5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the

complementarity of the nucleotide sequences of TRIM5 BINDING SITE, designated SEQ ID:5879, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54238] Another function of GAM7776 is therefore inhibition of Tripartite motif-containing 5 (TRIM5, Accession NP_149023.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TRIM5.

[54239] Tripartite motif-containing 6 (TRIM6, Accession NP_477514.1) is another GAM7776 target gene, herein designated TARGET GENE. TRIM6 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TRIM6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TRIM6 BINDING SITE, designated SEQ ID:13572, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54240] Another function of GAM7776 is therefore inhibition of Tripartite motif-containing 6 (TRIM6, Accession NP_477514.1) . Accordingly, utilities of GAM7776 include

diagnosis, prevention and treatment of diseases and clinical conditions associated with TRIM6.

[54241] TRIP-Br2 (Accession NP_055570.1) is another GAM7776 target gene, herein designated TARGET GENE. TRIP-Br2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TRIP-Br2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TRIP-Br2 BINDING SITE, designated SEQ ID:19574, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54242] Another function of GAM7776 is therefore inhibition of TRIP-Br2 (Accession NP_055570.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TRIP-Br2.

[54243] Transient receptor potential cation channel, subfamily m, member 6 (TRPM6, Accession NP_060132.3) is another GAM7776 target gene, herein designated TARGET GENE. TRPM6 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TRPM6, corresponding to a target binding site such as BINDING SITE

I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TRPM6 BINDING SITE, designated SEQ ID:18177, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54244] Another function of GAM7776 is therefore inhibition of Transient receptor potential cation channel, subfamily m, member 6 (TRPM6, Accession NP_060132.3), a gene which contains a predicted ion channel domain and a protein kinase domain. and therefore is associated with Hypomagnesemia with secondary hypocalcemia. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Hypomagnesemia with secondary hypocalcemia, and of other diseases and clinical conditions associated with TRPM6.

[54245] The function of TRPM6 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM130.1. Transient receptor potential cation channel, subfamily v, member 1 (TRPV1, Accession NP_061197.3) is another GAM7776 target gene, herein designated TARGET GENE. TRPV1 BINDING SITE1 and TRPV1 BINDING SITE2 are target binding sites found in untranslated re-

gions of multiple transcripts of mRNA encoded by TRPV1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TRPV1 BINDING SITE1 and TRPV1 BINDING SITE2, designated SEQ ID:19833 and SEQ ID:19833 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54246] Another function of GAM7776 is therefore inhibition of Transient receptor potential cation channel, subfamily v, member 1 (TRPV1, Accession NP_061197.3), a gene which functions as a receptor for capsaicin. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TRPV1.

[54247] The function of TRPV1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM130.1. Transient receptor potential cation channel, subfamily v, member 1 (TRPV1, Accession NP_542435.1) is another GAM7776 target gene, herein designated TARGET GENE. TRPV1 BINDING SITE1 and TRPV1 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by TRPV1,

corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TRPV1 BINDING SITE1 and TRPV1 BINDING SITE2, designated SEQ ID:16980 and SEQ ID:19833 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54248] Another function of GAM7776 is therefore inhibition of Transient receptor potential cation channel, subfamily v, member 1 (TRPV1, Accession NP_542435.1), a gene which functions as a receptor for capsaicin. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TRPV1.

[54249] The function of TRPV1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM130.1. Transient receptor potential cation channel, subfamily v, member 1 (TRPV1, Accession NP_061197.3) is another GAM7776 target gene, herein designated TARGET GENE. TRPV1 BINDING SITE1 and TRPV1 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by TRPV1, corresponding to target binding sites such as BINDING

SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TRPV1 BINDING SITE1 and TRPV1 BINDING SITE2, designated SEQ ID:16980 and SEQ ID:19833 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54250] Another function of GAM7776 is therefore inhibition of Transient receptor potential cation channel, subfamily v, member 1 (TRPV1, Accession NP_061197.3), a gene which functions as a receptor for capsaicin. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TRPV1.

[54251] The function of TRPV1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM130.1. Transient receptor potential cation channel, subfamily v, member 1 (TRPV1, Accession NP_542437.1) is another GAM7776 target gene, herein designated TARGET GENE. TRPV1 BINDING SITE1 and TRPV1 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by TRPV1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4

illustrates the complementarity of the nucleotide sequences of TRPV1 BINDING SITE1 and TRPV1 BINDING SITE2, designated SEQ ID:16980 and SEQ ID:16980 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54252] Another function of GAM7776 is therefore inhibition of Transient receptor potential cation channel, subfamily v, member 1 (TRPV1, Accession NP_542437.1), a gene which functions as a receptor for capsaicin. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TRPV1.

[54253] The function of TRPV1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM130.1. Tuberous sclerosis 1 (TSC1, Accession NP_000359.1) is another GAM7776 target gene, herein designated TARGET GENE. TSC1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TSC1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TSC1 BINDING SITE, designated SEQ ID:15082, to the nucleotide sequence of GAM7776

RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54254] Another function of GAM7776 is therefore inhibition of Tuberous sclerosis 1 (TSC1, Accession NP_000359.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TSC1.

[54255] Tspy-like (TSPYL, Accession XP_166325.1) is another GAM7776 target gene, herein designated TARGET GENE. TSPYL BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TSPYL, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TSPYL BINDING SITE, designated SEQ ID:15042, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54256] Another function of GAM7776 is therefore inhibition of Tspy-like (TSPYL, Accession XP_166325.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TSPYL.

[54257] TTY7 (Accession NP_114132.1) is another GAM7776 tar-

get gene, herein designated TARGET GENE. TTY7 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by TTY7, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TTY7 BINDING SITE, designated SEQ ID:1016, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54258] Another function of GAM7776 is therefore inhibition of TTY7 (Accession NP_114132.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TTY7.

[54259] TU12B1-TY (Accession NP_057659.1) is another GAM7776 target gene, herein designated TARGET GENE. TU12B1-TY BINDING SITE1 through TU12B1-TY BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by TU12B1-TY, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TU12B1-TY BINDING SITE1 through TU12B1-TY BINDING SITE3, designated SEQ ID:4256, SEQ ID:16036 and SEQ ID:15780 re-

spectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54260] Another function of GAM7776 is therefore inhibition of TU12B1-TY (Accession NP_057659.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TU12B1-TY.

[54261] TUCAN (Accession NP_055774.1) is another GAM7776 target gene, herein designated TARGET GENE. TUCAN BINDING SITE1 and TUCAN BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by TUCAN, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TUCAN BINDING SITE1 and TUCAN BINDING SITE2, designated SEQ ID:9530 and SEQ ID:7106 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54262] Another function of GAM7776 is therefore inhibition of TUCAN (Accession NP_055774.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TUCAN.

[54263] TXL-2 (Accession NP_835231.1) is another GAM7776 target gene, herein designated TARGET GENE. TXL-2 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by TXL-2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TXL-2 BINDING SITE, designated SEQ ID:15381, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54264] Another function of GAM7776 is therefore inhibition of TXL-2 (Accession NP_835231.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TXL-2.

[54265] Thioredoxin-like 2 (TXNL2, Accession NP_006532.1) is another GAM7776 target gene, herein designated TARGET GENE. TXNL2 BINDING SITE1 and TXNL2 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by TXNL2, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TXNL2 BINDING SITE1 and TXNL2 BINDING SITE2, designated SEQ ID:9147 and

SEQ ID:19232 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54266] Another function of GAM7776 is therefore inhibition of Thioredoxin-like 2 (TXNL2, Accession NP_006532.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TXNL2.

[54267] U1SNRNPBP (Accession NP_851030.1) is another GAM7776 target gene, herein designated TARGET GENE. U1SNRNPBP BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by U1SNRNPBP, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of U1SNRNPBP BINDING SITE, designated SEQ ID:9590, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54268] Another function of GAM7776 is therefore inhibition of U1SNRNPBP (Accession NP_851030.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

U1SNRNPBP.

[54269] U1SNRNPBP (Accession NP_851034.1) is another GAM7776 target gene, herein designated TARGET GENE. U1SNRNPBP BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by U1SNRNPBP, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of U1SNRNPBP BINDING SITE, designated SEQ ID:9590, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54270] Another function of GAM7776 is therefore inhibition of U1SNRNPBP (Accession NP_851034.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with U1SNRNPBP.

[54271] U1SNRNPBP (Accession NP_008951.1) is another GAM7776 target gene, herein designated TARGET GENE. U1SNRNPBP BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by U1SNRNPBP, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or

BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of U1SNRNPBP BINDING SITE, designated SEQ ID:9590, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54272] Another function of GAM7776 is therefore inhibition of U1SNRNPBP (Accession NP_008951.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with U1SNRNPBP.

[54273] UCK1 (Accession NP_113620.1) is another GAM7776 target gene, herein designated TARGET GENE. UCK1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by UCK1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of UCK1 BINDING SITE, designated SEQ ID:11791, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54274] Another function of GAM7776 is therefore inhibition of UCK1 (Accession NP_113620.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of

diseases and clinical conditions associated with UCK1.

[54275] Udp-glucose dehydrogenase (UGDH, Accession NP_003350.1) is another GAM7776 target gene, herein designated TARGET GENE. UGDH BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by UGDH, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of UGDH BINDING SITE, designated SEQ ID:7909, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54276] Another function of GAM7776 is therefore inhibition of Udp-glucose dehydrogenase (UGDH, Accession NP_003350.1), a gene which is an UDP- glucose dehydrogenase. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with UGDH.

[54277] The function of UGDH and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM69.2.Udp glycosyltransferase 1 family, polypeptide a1 (UGT1A1, Accession NP_000454.1) is another

GAM7776 target gene, herein designated TARGET GENE. UGT1A1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by UGT1A1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of UGT1A1 BINDING SITE, designated SEQ ID:10967, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54278] Another function of GAM7776 is therefore inhibition of Udp glycosyltransferase 1 family, polypeptide a1 (UGT1A1, Accession NP_000454.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with UGT1A1.

[54279] Udp glycosyltransferase 1 family, polypeptide a10 (UGT1A10, Accession NP_061948.1) is another GAM7776 target gene, herein designated TARGET GENE. UGT1A10 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by UGT1A10, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

UGT1A10 BINDING SITE, designated SEQ ID:10967, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54280] Another function of GAM7776 is therefore inhibition of Udp glycosyltransferase 1 family, polypeptide a10 (UGT1A10, Accession NP_061948.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with UGT1A10.

[54281] Udp glycosyltransferase 1 family, polypeptide a4 (UGT1A4, Accession NP_009051.1) is another GAM7776 target gene, herein designated TARGET GENE. UGT1A4 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by UGT1A4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of UGT1A4 BINDING SITE, designated SEQ ID:10967, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54282] Another function of GAM7776 is therefore inhibition of Udp glycosyltransferase 1 family, polypeptide a4 (UGT1A4, Accession NP_009051.1), a gene which is of

major importance in the conjugation and subsequent elimination of potentially toxic xenobiotics and endogenous compounds. and therefore may be associated with Gilbert's syndrome, crigler- najjar. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Gilbert's syndrome, crigler- najjar, and of other diseases and clinical conditions associated with UGT1A4.

[54283] The function of UGT1A4 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1.Udp glycosyltransferase 1 family, polypeptide a6 (UGT1A6, Accession NP_001063.1) is another GAM7776 target gene, herein designated TARGET GENE. UGT1A6 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by UGT1A6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of UGT1A6 BINDING SITE, designated SEQ ID:10967, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54284] Another function of GAM7776 is therefore inhibition of Udp glycosyltransferase 1 family, polypeptide a6

(UGT1A6, Accession NP_001063.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with UGT1A6.

[54285] Udp glycosyltransferase 1 family, polypeptide a8 (UGT1A8, Accession NP_061949.3) is another GAM7776 target gene, herein designated TARGET GENE. UGT1A8 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by UGT1A8, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of UGT1A8 BINDING SITE, designated SEQ ID:10967, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54286] Another function of GAM7776 is therefore inhibition of Udp glycosyltransferase 1 family, polypeptide a8 (UGT1A8, Accession NP_061949.3), a gene which is of major importance in the conjugation and subsequent elimination of potentially toxic xenobiotics and endogenous compounds. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with UGT1A8.

[54287] The function of UGT1A8 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1.Udp glycosyltransferase 1 family, polypeptide a9 (UGT1A9, Accession NP_066307.1) is another GAM7776 target gene, herein designated TARGET GENE. UGT1A9 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by UGT1A9, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of UGT1A9 BINDING SITE, designated SEQ ID:10967, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54288] Another function of GAM7776 is therefore inhibition of Udp glycosyltransferase 1 family, polypeptide a9 (UGT1A9, Accession NP_066307.1), a gene which is of major importance in the conjugation and subsequent elimination of potentially toxic xenobiotics and endogenous compounds. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with UGT1A9.

[54289] The function of UGT1A9 and its association with various

diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1. Uridine monophosphate synthetase (orotate phosphoribosyl transferase and orotidine-5'-decarboxylase) (UMPS, Accession NP_000364.1) is another GAM7776 target gene, herein designated TARGET GENE. UMPS BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by UMPS, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of UMPS BINDING SITE, designated SEQ ID:2144, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54290] Another function of GAM7776 is therefore inhibition of Uridine monophosphate synthetase (orotate phosphoribosyl transferase and orotidine-5'-decarboxylase) (UMPS, Accession NP_000364.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with UMPS.

[54291] Unc-84 homolog a (c. elegans) (UNC84B, Accession NP_056189.1) is another GAM7776 target gene, herein designated TARGET GENE. UNC84B BINDING SITE is a tar-

get binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by UNC84B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of UNC84B BINDING SITE, designated SEQ ID:13541, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54292] Another function of GAM7776 is therefore inhibition of Unc-84 homolog a (c. elegans) (UNC84B, Accession NP_056189.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with UNC84B.

[54293] Unc-84 homolog a (c. elegans) (UNC84B, Accession XP_039332.1) is another GAM7776 target gene, herein designated TARGET GENE. UNC84B BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by UNC84B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of UNC84B BINDING SITE, designated SEQ ID:13541, to the nucleotide sequence of GAM7776 RNA, herein designated

GAM RNA, also designated SEQ ID:246.

[54294] Another function of GAM7776 is therefore inhibition of Unc-84 homolog a (c. elegans) (UNC84B, Accession XP_039332.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with UNC84B.

[54295] URG4 (Accession NP_060390.2) is another GAM7776 target gene, herein designated TARGET GENE. URG4 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by URG4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of URG4 BINDING SITE, designated SEQ ID:6788, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54296] Another function of GAM7776 is therefore inhibition of URG4 (Accession NP_060390.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with URG4.

[54297] Ubiquitin specific protease 22 (USP22, Accession XP_042698.2) is another GAM7776 target gene, herein designated TARGET GENE. USP22 BINDING SITE is a target

binding site found in the 3' untranslated region of mRNA encoded by USP22, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of USP22 BINDING SITE, designated SEQ ID:11288, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54298] Another function of GAM7776 is therefore inhibition of Ubiquitin specific protease 22 (USP22, Accession XP_042698.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with USP22.

[54299] VDU1 (Accession NP_055832.2) is another GAM7776 target gene, herein designated TARGET GENE. VDU1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by VDU1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of VDU1 BINDING SITE, designated SEQ ID:3187, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54300] Another function of GAM7776 is therefore inhibition of VDU1 (Accession NP_055832.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with VDU1.

[54301] Vent-like homeobox 2 (VENTX2, Accession NP_055283.1) is another GAM7776 target gene, herein designated TARGET GENE. VENTX2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by VENTX2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of VENTX2 BINDING SITE, designated SEQ ID:19331, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54302] Another function of GAM7776 is therefore inhibition of Vent-like homeobox 2 (VENTX2, Accession NP_055283.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with VENTX2.

[54303] Von hippel-lindau syndrome (VHL, Accession NP_000542.1) is another GAM7776 target gene, herein designated TARGET GENE. VHL BINDING SITE1 and VHL

BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by VHL, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of VHL BINDING SITE1 and VHL BINDING SITE2, designated SEQ ID:3873 and SEQ ID:8786 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54304] Another function of GAM7776 is therefore inhibition of Von hippel–lindau syndrome (VHL, Accession NP_000542.1), a gene which may control rna stability through the selective degradation of rna– bound proteins. and therefore is associated with Von hippel– lindau disease. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Von hippel– lindau disease, and of other diseases and clinical conditions associated with VHL.

[54305] The function of VHL and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM72.1.Vasoactive intestinal peptide receptor 2 (VIPR2, Accession NP_003373.2) is another GAM7776 tar–

get gene, herein designated TARGET GENE. VIPR2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by VIPR2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of VIPR2 BINDING SITE, designated SEQ ID:7754, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54306] Another function of GAM7776 is therefore inhibition of Vasoactive intestinal peptide receptor 2 (VIPR2, Accession NP_003373.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with VIPR2.

[54307] VPS39 (Accession XP_031720.2) is another GAM7776 target gene, herein designated TARGET GENE. VPS39 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by VPS39, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of VPS39 BINDING SITE, designated SEQ ID:18246, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA,

also designated SEQ ID:246.

[54308] Another function of GAM7776 is therefore inhibition of VPS39 (Accession XP_031720.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with VPS39.

[54309] Vesicle transport through interaction with t-snares homolog 1a (yeast) (VTI1A, Accession NP_660207.1) is another GAM7776 target gene, herein designated TARGET GENE. VTI1A BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by VTI1A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of VTI1A BINDING SITE, designated SEQ ID:2313, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54310] Another function of GAM7776 is therefore inhibition of Vesicle transport through interaction with t-snares homolog 1a (yeast) (VTI1A, Accession NP_660207.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with VTI1A.

[54311] Williams beuren syndrome chromosome region 18

(WBSCR18, Accession NP_115693.2) is another GAM7776 target gene, herein designated TARGET GENE. WBSCR18 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by WBSCR18, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of WBSCR18 BINDING SITE, designated SEQ ID:2152, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54312] Another function of GAM7776 is therefore inhibition of Williams beuren syndrome chromosome region 18 (WBSCR18, Accession NP_115693.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with WBSCR18.

[54313] Wd repeat domain 6 (WDR6, Accession NP_439891.1) is another GAM7776 target gene, herein designated TARGET GENE. WDR6 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by WDR6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementar-

ity of the nucleotide sequences of WDR6 BINDING SITE, designated SEQ ID:12628, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

- [54314] Another function of GAM7776 is therefore inhibition of Wd repeat domain 6 (WDR6, Accession NP_439891.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with WDR6.
- [54315] Wolf-hirschhorn syndrome candidate 1 (WHSC1, Accession NP_579889.1) is another GAM7776 target gene, herein designated TARGET GENE. WHSC1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by WHSC1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of WHSC1 BINDING SITE, designated SEQ ID:9245, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.
- [54316] Another function of GAM7776 is therefore inhibition of Wolf-hirschhorn syndrome candidate 1 (WHSC1, Accession NP_579889.1), a gene which binds covalently to and

repairs g/t mismatches. and therefore may be associated with Wolf- hirschhorn syndrome. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of Wolf- hirschhorn syndrome, and of other diseases and clinical conditions associated with WHSC1.

[54317] The function of WHSC1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1.Wingless-type mmtv integration site family, member 5a (WNT5A, Accession NP_003383.1) is another GAM7776 target gene, herein designated TARGET GENE. WNT5A BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by WNT5A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of WNT5A BINDING SITE, designated SEQ ID:10269, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54318] Another function of GAM7776 is therefore inhibition of Wingless-type mmtv integration site family, member 5a (WNT5A, Accession NP_003383.1), a gene which is a ligand for members of the frizzled family of seven trans-

membrane receptors and is probably a developmental protein. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with WNT5A.

[54319] The function of WNT5A and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM116.1.X-ray repair complementing defective repair in chinese hamster cells 2 (XRCC2, Accession NP_005422.1) is another GAM7776 target gene, herein designated TARGET GENE. XRCC2 BINDING SITE1 through XRCC2 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by XRCC2, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of XRCC2 BINDING SITE1 through XRCC2 BINDING SITE3, designated SEQ ID:9688, SEQ ID:10148 and SEQ ID:12605 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54320] Another function of GAM7776 is therefore inhibition of X-ray repair complementing defective repair in chinese

hamster cells 2 (XRCC2, Accession NP_005422.1), a gene which involves in the homologous recombination repair (hrr) pathway of double-stranded dna. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with XRCC2.

[54321] The function of XRCC2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM72.1.V-yes-1 yamaguchi sarcoma viral oncogene homolog 1 (YES1, Accession NP_005424.1) is another GAM7776 target gene, herein designated TARGET GENE. YES1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by YES1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of YES1 BINDING SITE, designated SEQ ID:16112, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54322] Another function of GAM7776 is therefore inhibition of V-yes-1 yamaguchi sarcoma viral oncogene homolog 1 (YES1, Accession NP_005424.1), a gene which is a putative

protein- tyrosine kinase. Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with YES1.

[54323] The function of YES1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1.ZAP (Accession NP_064504.2) is another GAM7776 target gene, herein designated TARGET GENE. ZAP BINDING SITE1 and ZAP BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by ZAP, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZAP BINDING SITE1 and ZAP BINDING SITE2, designated SEQ ID:508 and SEQ ID:3071 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54324] Another function of GAM7776 is therefore inhibition of ZAP (Accession NP_064504.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZAP.

[54325] ZFP30 (Accession NP_055713.1) is another GAM7776 tar-

get gene, herein designated TARGET GENE. ZFP30 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZFP30, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZFP30 BINDING SITE, designated SEQ ID:9331, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54326] Another function of GAM7776 is therefore inhibition of ZFP30 (Accession NP_055713.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZFP30.

[54327] ZFP42 (Accession NP_777560.1) is another GAM7776 target gene, herein designated TARGET GENE. ZFP42 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZFP42, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZFP42 BINDING SITE, designated SEQ ID:10587, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54328] Another function of GAM7776 is therefore inhibition of ZFP42 (Accession NP_777560.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZFP42.

[54329] Zinc finger protein 64 homolog (mouse) (ZFP64, Accession NP_060667.1) is another GAM7776 target gene, herein designated TARGET GENE. ZFP64 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by ZFP64, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZFP64 BINDING SITE, designated SEQ ID:15043, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54330] Another function of GAM7776 is therefore inhibition of Zinc finger protein 64 homolog (mouse) (ZFP64, Accession NP_060667.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZFP64.

[54331] Zinc finger protein 64 homolog (mouse) (ZFP64, Accession NP_071371.2) is another GAM7776 target gene, herein designated TARGET GENE. ZFP64 BINDING SITE is a target

binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by ZFP64, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZFP64 BINDING SITE, designated SEQ ID:15043, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54332] Another function of GAM7776 is therefore inhibition of Zinc finger protein 64 homolog (mouse) (ZFP64, Accession NP_071371.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZFP64.

[54333] ZFYVE26 (Accession XP_031077.1) is another GAM7776 target gene, herein designated TARGET GENE. ZFYVE26 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZFYVE26, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZFYVE26 BINDING SITE, designated SEQ ID:12160, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54334] Another function of GAM7776 is therefore inhibition of ZFYVE26 (Accession XP_031077.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZFYVE26.

[54335] ZMYND17 (Accession NP_848546.1) is another GAM7776 target gene, herein designated TARGET GENE. ZMYND17 BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by ZMYND17, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZMYND17 BINDING SITE, designated SEQ ID:456, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54336] Another function of GAM7776 is therefore inhibition of ZMYND17 (Accession NP_848546.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZMYND17.

[54337] Zinc finger protein 18 (kox 11) (ZNF18, Accession XP_085596.2) is another GAM7776 target gene, herein designated TARGET GENE. ZNF18 BINDING SITE is a target

binding site found in the 5` untranslated region of mRNA encoded by ZNF18, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF18 BINDING SITE, designated SEQ ID:19151, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54338] Another function of GAM7776 is therefore inhibition of Zinc finger protein 18 (kox 11) (ZNF18, Accession XP_085596.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF18.

[54339] Zinc finger protein 253 (ZNF253, Accession NP_066385.1) is another GAM7776 target gene, herein designated TARGET GENE. ZNF253 BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by ZNF253, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF253 BINDING SITE, designated SEQ ID:19746, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ

ID:246.

[54340] Another function of GAM7776 is therefore inhibition of Zinc finger protein 253 (ZNF253, Accession NP_066385.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF253.

[54341] Zinc finger protein 264 (ZNF264, Accession NP_003408.1) is another GAM7776 target gene, herein designated TARGET GENE. ZNF264 BINDING SITE1 and ZNF264 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by ZNF264, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF264 BINDING SITE1 and ZNF264 BINDING SITE2, designated SEQ ID:9147 and SEQ ID:3319 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54342] Another function of GAM7776 is therefore inhibition of Zinc finger protein 264 (ZNF264, Accession NP_003408.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF264.

[54343] Zinc finger protein 273 (ZNF273, Accession XP_088082.1) is another GAM7776 target gene, herein designated TARGET GENE. ZNF273 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZNF273, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF273 BINDING SITE, designated SEQ ID:18868, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54344] Another function of GAM7776 is therefore inhibition of Zinc finger protein 273 (ZNF273, Accession XP_088082.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF273.

[54345] Zinc finger protein 281 (ZNF281, Accession NP_036614.1) is another GAM7776 target gene, herein designated TARGET GENE. ZNF281 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZNF281, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of ZNF281 BINDING SITE, designated SEQ ID:16434, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54346] Another function of GAM7776 is therefore inhibition of Zinc finger protein 281 (ZNF281, Accession NP_036614.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF281.

[54347] Zinc finger protein 289, id1 regulated (ZNF289, Accession NP_115765.2) is another GAM7776 target gene, herein designated TARGET GENE. ZNF289 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZNF289, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF289 BINDING SITE, designated SEQ ID:13159, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54348] Another function of GAM7776 is therefore inhibition of Zinc finger protein 289, id1 regulated (ZNF289, Accession NP_115765.2) . Accordingly, utilities of GAM7776 include

diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF289.

[54349] Zinc finger protein 305 (ZNF305, Accession NP_055539.1) is another GAM7776 target gene, herein designated TARGET GENE. ZNF305 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZNF305, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF305 BINDING SITE, designated SEQ ID:18505, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54350] Another function of GAM7776 is therefore inhibition of Zinc finger protein 305 (ZNF305, Accession NP_055539.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF305.

[54351] Zinc finger protein 334 (ZNF334, Accession NP_060572.2) is another GAM7776 target gene, herein designated TARGET GENE. ZNF334 BINDING SITE1 and ZNF334 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by ZNF334, corresponding to tar-

get binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF334 BINDING SITE1 and ZNF334 BINDING SITE2, designated SEQ ID:9628 and SEQ ID:5064 respectively, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54352] Another function of GAM7776 is therefore inhibition of Zinc finger protein 334 (ZNF334, Accession NP_060572.2). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF334.

[54353] Zinc finger protein 339 (ZNF339, Accession NP_067043.1) is another GAM7776 target gene, herein designated TARGET GENE. ZNF339 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZNF339, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF339 BINDING SITE, designated SEQ ID:1729, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54354] Another function of GAM7776 is therefore inhibition of Zinc finger protein 339 (ZNF339, Accession NP_067043.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF339.

[54355] Zinc finger protein 345 (ZNF345, Accession NP_003410.1) is another GAM7776 target gene, herein designated TARGET GENE. ZNF345 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZNF345, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF345 BINDING SITE, designated SEQ ID:1011, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54356] Another function of GAM7776 is therefore inhibition of Zinc finger protein 345 (ZNF345, Accession NP_003410.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF345.

[54357] Zinc finger protein 398 (ZNF398, Accession NP_065832.1) is another GAM7776 target gene, herein designated TAR-

GET GENE. ZNF398 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by ZNF398, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF398 BINDING SITE, designated SEQ ID:8530, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54358] Another function of GAM7776 is therefore inhibition of Zinc finger protein 398 (ZNF398, Accession NP_065832.1). Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF398.

[54359] ZNF409 (Accession NP_055709.1) is another GAM7776 target gene, herein designated TARGET GENE. ZNF409 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by ZNF409, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF409 BINDING SITE, designated SEQ ID:2388, to the nucleotide sequence of GAM7776 RNA, herein designated

GAM RNA, also designated SEQ ID:246.

[54360] Another function of GAM7776 is therefore inhibition of ZNF409 (Accession NP_055709.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF409.

[54361] ZNF431 (Accession XP_086098.2) is another GAM7776 target gene, herein designated TARGET GENE. ZNF431 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZNF431, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF431 BINDING SITE, designated SEQ ID:8477, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54362] Another function of GAM7776 is therefore inhibition of ZNF431 (Accession XP_086098.2) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF431.

[54363] ZNF432 (Accession NP_055465.1) is another GAM7776 target gene, herein designated TARGET GENE. ZNF432 BINDING SITE is a target binding site found in the 3' un-

translated region of mRNA encoded by ZNF432, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF432 BINDING SITE, designated SEQ ID:5065, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54364] Another function of GAM7776 is therefore inhibition of ZNF432 (Accession NP_055465.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF432.

[54365] ZNF440 (Accession NP_689570.1) is another GAM7776 target gene, herein designated TARGET GENE. ZNF440 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZNF440, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF440 BINDING SITE, designated SEQ ID:1744, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54366] Another function of GAM7776 is therefore inhibition of

ZNF440 (Accession NP_689570.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF440.

[54367] Zinc finger protein 70 (cos17) (ZNF70, Accession NP_068735.1) is another GAM7776 target gene, herein designated TARGET GENE. ZNF70 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by ZNF70, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF70 BINDING SITE, designated SEQ ID:17076, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54368] Another function of GAM7776 is therefore inhibition of Zinc finger protein 70 (cos17) (ZNF70, Accession NP_068735.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF70.

[54369] Zinc finger protein 70 (cos17) (ZNF70, Accession NP_852101.1) is another GAM7776 target gene, herein designated TARGET GENE. ZNF70 BINDING SITE is a target

binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by ZNF70, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF70 BINDING SITE, designated SEQ ID:17076, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ ID:246.

[54370] Another function of GAM7776 is therefore inhibition of Zinc finger protein 70 (cos17) (ZNF70, Accession NP_852101.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF70.

[54371] Zinc finger protein 74 (cos52) (ZNF74, Accession NP_003417.1) is another GAM7776 target gene, herein designated TARGET GENE. ZNF74 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by ZNF74, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF74 BINDING SITE, designated SEQ ID:12340, to the nucleotide sequence of GAM7776 RNA, herein designated GAM RNA, also designated SEQ

ID:246.

[54372] Another function of GAM7776 is therefore inhibition of Zinc finger protein 74 (cos52) (ZNF74, Accession NP_003417.1) . Accordingly, utilities of GAM7776 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF74.

[54373]

[54374] Fig. 8 further provides a conceptual description of a novel bioinformatically detected of the present invention, referred to here as Genomic Address Messenger 7809 (GAM7809), which modulates expression of respective target genes thereof, the function and utility of which target genes is known in the art.

[54375] GAM7809 is a novel bioinformatically detected regulatory, non protein coding, micro RNA (miRNA) gene. The method by which GAM7809 was detected is described hereinabove with reference to Figs. 8–15.

[54376] GAM7809 gene, herein designated GAM GENE, and GAM7809 target gene, herein designated TARGET GENE, are human genes contained in the human genome.

[54377] GAM7809 gene encodes a GAM7809 precursor RNA, herein designated GAM PRECURSOR RNA. Similar to other miRNA genes, and unlike most ordinary genes, GAM7809

precursor RNA does not encode a protein. A nucleotide sequence identical or highly similar to the nucleotide sequence of GAM7809 precursor RNA is designated SEQ ID:180, and is provided hereinbelow with reference to the sequence listing part.

[54378] GAM7809 precursor RNA folds onto itself, forming GAM7809 folded precursor RNA, herein designated GAM FOLDED PRECURSOR RNA, which has a two-dimensional `hairpin structure`. As is well known in the art, this `hairpin structure`, is typical of RNA encoded by miRNA genes, and is due to the fact that the nucleotide sequence of the first half of the RNA encoded by a miRNA gene is an accurate or partial inversed-reversed sequence of the nucleotide sequence of the second half thereof.

[54379] GAM7809 precursor RNA folds onto itself, forming GAM7809 folded precursor RNA, herein designated GAM FOLDED PRECURSOR RNA, which has a two-dimensional `hairpin structure`. As is well known in the art, this `hairpin structure`, is typical of RNA encoded by miRNA genes, and is due to the fact that the nucleotide sequence of the first half of the RNA encoded by a miRNA gene is an accurate or partial reverse-complementary sequence of the nucleotide sequence of the second half thereof.

[54380] Nucleotide sequence of GAM7809 precursor RNA, designated SEQ-ID: 180, and a schematic representation of a predicted secondary folding of GAM7809 folded precursor RNA are further described with reference to Table 2, hereby incorporated by reference.

[54381] An enzyme complex designated DICER COMPLEX, `dices` the GAM7809 folded precursor RNA into GAM7809 RNA, herein designated GAM RNA, a single stranded ~22 nt long RNA segment. As is known in the art, `dicing` of a hairpin structured RNA precursor product into a short ~22nt RNA segment is catalyzed by an enzyme complex comprising an enzyme called Dicer together with other necessary proteins. A probable (GAM Prediction Accuracy Group: A) nucleotide sequence of GAM7809 RNA is designated SEQ ID:398, and is provided hereinbelow with references to the sequence listing part and Table 3, hereby incorporated by reference.

[54382] GAM7809 target gene, herein designated TARGET GENE, encodes a corresponding messenger RNA, GAM7809 target RNA, herein designated GAM TARGET RNA. GAM7809 target RNA comprises three regions, as is typical of mRNA of a protein coding gene: a 5` untranslated region, a protein coding region and a 3` untranslated region, design-

nated 5`UTR, PROTEIN CODING and 3`UTR respectively.

[54383] GAM7809 RNA, herein designated GAM RNA, binds complementarily to one or more target binding sites located in untranslated regions of GAM7809 target RNA, herein designated GAM TARGET RNA. This complementary binding is due to the fact that the nucleotide sequence of GAM7809 RNA is an accurate or a partial inversed-reversed sequence of the nucleotide sequence of each of the target binding sites. As an illustration, Fig. 8 shows three such target binding sites, designated BINDING SITE I, BINDING SITE II and BINDING SITE III respectively. It is appreciated that the number of target binding sites shown in Fig. 8 is meant as an illustration only, and is not meant to be limiting. GAM7809 RNA may have a different number of target binding sites in untranslated regions of a GAM7809 target RNA. It is further appreciated that while Fig. 8 depicts target binding sites in the 3`UTR region, this is meant as an example only. These target binding sites may be located in the 3`UTR region, the 5`UTR region, or in both 3`UTR and 5`UTR regions.

[54384] The complementary binding of GAM7809 RNA, herein designated GAM RNA, to target binding sites on GAM7809 target RNA, herein designated GAM TARGET RNA, such as

BINDING SITE I, BINDING SITE II and BINDING SITE III, inhibits translation of GAM7809 target RNA into GAM7809 target protein, herein designated GAM TARGET PROTEIN. GAM target protein is therefore outlined by a broken line.

[54385] It is appreciated that GAM7809 target gene, herein designated TARGET GENE, in fact represents a plurality of GAM7809 target genes. The mRNA of each one of this plurality of GAM7809 target genes comprises one or more target binding sites, each having a nucleotide sequence which is at least partly complementary to GAM7809 RNA, herein designated GAM RNA, and which when bound by GAM7809 RNA causes inhibition of translation of respective one or more GAM7809 target proteins.

[54386] It is further appreciated by one skilled in the art that the mode of translational inhibition illustrated by Fig. 8 with specific reference to translational inhibition exerted by GAM7809 gene, herein designated GAM GENE, on one or more GAM7809 target genes, herein collectively designated TARGET GENE, is common to other known miRNA genes. As mentioned hereinabove with reference to the background section, although a specific complementary binding site has been demonstrated only for some of the known miRNA genes (primarily Lin-4 and Let-7), all other

recently discovered miRNA genes are also believed by those skilled in the art to modulate expression of other genes by complementary binding, although specific complementary binding sites of these other miRNA genes have not yet been found (Ruvkun G., Perspective: Glimpses of a tiny RNA world, Science 294,779 (2001)).

[54387] It is appreciated that specific functions and accordingly utilities of GAM7809 correlate with, and may be deduced from, the identity of the target genes which GAM7809 binds and inhibits, and the function of these target genes, as elaborated hereinbelow.

[54388]

[54389]

[54390] Apoptotic protease activating factor (APAF1, Accession NP_001151.1) is a GAM7809 target gene, herein designated TARGET GENE. APAF1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by APAF1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of APAF1 BINDING SITE, designated SEQ ID:11564, to the nucleotide se-

quence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54391] A function of GAM7809 is therefore inhibition of Apoptotic protease activating factor (APAF1, Accession NP_001151.1), a gene which functions in the mitochondrial apoptotic pathway that leads to caspase 9 dependent activation of caspase 3 and therefore may be associated with Cancer. Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of Cancer, and of other diseases and clinical conditions associated with APAF1.

[54392] The function of APAF1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1. Apoptotic protease activating factor (APAF1, Accession NP_037361.1) is another GAM7809 target gene, herein designated TARGET GENE. APAF1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by APAF1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of APAF1 BINDING SITE, designated SEQ ID:11564, to the nucleotide sequence of GAM7809 RNA, herein designated

GAM RNA, also designated SEQ ID:398.

[54393] Another function of GAM7809 is therefore inhibition of Apoptotic protease activating factor (APAF1, Accession NP_037361.1), a gene which functions in the mitochondrial apoptotic pathway that leads to caspase 9 dependent activation of caspase 3 and therefore may be associated with Cancer. Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of Cancer, and of other diseases and clinical conditions associated with APAF1.

[54394] The function of APAF1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1.C10orf5 (Accession NP_848931.1) is another GAM7809 target gene, herein designated TARGET GENE. C10orf5 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by C10orf5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C10orf5 BINDING SITE, designated SEQ ID:3002, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54395] Another function of GAM7809 is therefore inhibition of C10orf5 (Accession NP_848931.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C10orf5.

[54396] Chromosome 20 open reading frame 173 (C20orf173, Accession NP_543018.1) is another GAM7809 target gene, herein designated TARGET GENE. C20orf173 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C20orf173, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C20orf173 BINDING SITE, designated SEQ ID:8641, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54397] Another function of GAM7809 is therefore inhibition of Chromosome 20 open reading frame 173 (C20orf173, Accession NP_543018.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C20orf173.

[54398] Chromosome 8 open reading frame 7 (C8orf7, Accession XP_088376.1) is another GAM7809 target gene, herein

designated TARGET GENE. C8orf7 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C8orf7, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C8orf7 BINDING SITE, designated SEQ ID:2030, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54399] Another function of GAM7809 is therefore inhibition of Chromosome 8 open reading frame 7 (C8orf7, Accession XP_088376.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C8orf7.

[54400] Chemokine (c-c motif) ligand 1 (CCL1, Accession NP_002972.1) is another GAM7809 target gene, herein designated TARGET GENE. CCL1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CCL1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CCL1 BINDING SITE, designated SEQ ID:10810, to the nucleotide sequence of GAM7809

RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54401] Another function of GAM7809 is therefore inhibition of Chemokine (c-c motif) ligand 1 (CCL1, Accession NP_002972.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CCL1.

[54402] Cytochrome c oxidase subunit viia polypeptide 2 like (COX7A2L, Accession NP_004709.2) is another GAM7809 target gene, herein designated TARGET GENE. COX7A2L BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by COX7A2L, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of COX7A2L BINDING SITE, designated SEQ ID:3657, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54403] Another function of GAM7809 is therefore inhibition of Cytochrome c oxidase subunit viia polypeptide 2 like (COX7A2L, Accession NP_004709.2) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

COX7A2L.

[54404] Catenin (cadherin-associated protein), delta 1 (CTNND1, Accession NP_001322.1) is another GAM7809 target gene, herein designated TARGET GENE. CTNND1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CTNND1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CTNND1 BINDING SITE, designated SEQ ID:15144, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54405] Another function of GAM7809 is therefore inhibition of Catenin (cadherin-associated protein), delta 1 (CTNND1, Accession NP_001322.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CTNND1.

[54406] Dead/h (asp-glu-ala-asp/his) box polypeptide 11 (chl1-like helicase homolog, s. cerevisiae) (DDX11, Accession NP_085913.1) is another GAM7809 target gene, herein designated TARGET GENE. DDX11 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by DDX11, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DDX11 BINDING SITE, designated SEQ ID:7637, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54407] Another function of GAM7809 is therefore inhibition of Dead/h (asp-glu-ala-asp/his) box polypeptide 11 (chl1-like helicase homolog, *s. cerevisiae*) (DDX11, Accession NP_085913.1), a gene which could be an ATP-dependent DNA-binding helicase and may intervene in cell cycle regulation. Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DDX11.

[54408] The function of DDX11 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM63.1. Dead/h (asp-glu-ala-asp/his) box polypeptide 39 (DDX39, Accession NP_620551.1) is another GAM7809 target gene, herein designated TARGET GENE. DDX39 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by DDX39, corresponding to a target binding site

such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DDX39 BINDING SITE, designated SEQ ID:8028, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54409] Another function of GAM7809 is therefore inhibition of Dead/h (asp-glu-ala-asp/his) box polypeptide 39 (DDX39, Accession NP_620551.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DDX39.

[54410] Diacylglycerol o-acyltransferase homolog 1 (mouse) (DGAT1, Accession NP_036211.1) is another GAM7809 target gene, herein designated TARGET GENE. DGAT1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DGAT1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DGAT1 BINDING SITE, designated SEQ ID:9487, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54411] Another function of GAM7809 is therefore inhibition of

Diacylglycerol o-acyltransferase homolog 1 (mouse) (DGAT1, Accession NP_036211.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DGAT1.

[54412] Deiodinase, iodothyronine, type ii (DIO2, Accession NP_000784.2) is another GAM7809 target gene, herein designated TARGET GENE. DIO2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by DIO2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DIO2 BINDING SITE, designated SEQ ID:17701, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54413] Another function of GAM7809 is therefore inhibition of Deiodinase, iodothyronine, type ii (DIO2, Accession NP_000784.2) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DIO2.

[54414] Deiodinase, iodothyronine, type ii (DIO2, Accession NP_054644.1) is another GAM7809 target gene, herein designated TARGET GENE. DIO2 BINDING SITE is a target

binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by DIO2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DIO2 BINDING SITE, designated SEQ ID:17701, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54415] Another function of GAM7809 is therefore inhibition of Deiodinase, iodothyronine, type ii (DIO2, Accession NP_054644.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DIO2.

[54416] DKFZp434C0328 (Accession NP_060047.1) is another GAM7809 target gene, herein designated TARGET GENE. DKFZp434C0328 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by DKFZp434C0328, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp434C0328 BINDING SITE, designated SEQ ID:11265, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also design-

nated SEQ ID:398.

[54417] Another function of GAM7809 is therefore inhibition of DKFZp434C0328 (Accession NP_060047.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp434C0328.

[54418] DKFZP434L1717 (Accession NP_115512.2) is another GAM7809 target gene, herein designated TARGET GENE. DKFZP434L1717 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZP434L1717, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP434L1717 BINDING SITE, designated SEQ ID:9242, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54419] Another function of GAM7809 is therefore inhibition of DKFZP434L1717 (Accession NP_115512.2) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZP434L1717.

[54420] DKFZP564O1863 (Accession NP_056448.1) is another

GAM7809 target gene, herein designated TARGET GENE. DKFZP564O1863 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZP564O1863, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP564O1863 BINDING SITE, designated SEQ ID:4432, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54421] Another function of GAM7809 is therefore inhibition of DKFZP564O1863 (Accession NP_056448.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZP564O1863.

[54422] DKFZp761D112 (Accession NP_115673.1) is another GAM7809 target gene, herein designated TARGET GENE. DKFZp761D112 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZp761D112, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp761D112 BINDING SITE,

designated SEQ ID:7056, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54423] Another function of GAM7809 is therefore inhibition of DKFZp761D112 (Accession NP_115673.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp761D112.

[54424] DKFZp761P1121 (Accession NP_690870.1) is another GAM7809 target gene, herein designated TARGET GENE. DKFZp761P1121 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZp761P1121, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp761P1121 BINDING SITE, designated SEQ ID:15876, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54425] Another function of GAM7809 is therefore inhibition of DKFZp761P1121 (Accession NP_690870.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated

with DKFZp761P1121.

[54426] Dual specificity phosphatase 16 (DUSP16, Accession XP_039106.1) is another GAM7809 target gene, herein designated TARGET GENE. DUSP16 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DUSP16, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DUSP16 BINDING SITE, designated SEQ ID:12004, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54427] Another function of GAM7809 is therefore inhibition of Dual specificity phosphatase 16 (DUSP16, Accession XP_039106.1). Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DUSP16.

[54428] Endothelial differentiation, sphingolipid g-protein-coupled receptor, 3 (EDG3, Accession NP_005217.1) is another GAM7809 target gene, herein designated TARGET GENE. EDG3 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by EDG3, corresponding to a target binding site such as

BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of EDG3 BINDING SITE, designated SEQ ID:16612, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54429] Another function of GAM7809 is therefore inhibition of Endothelial differentiation, sphingolipid g-protein-coupled receptor, 3 (EDG3, Accession NP_005217.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with EDG3.

[54430] FLJ12363 (Accession NP_115543.1) is another GAM7809 target gene, herein designated TARGET GENE. FLJ12363 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ12363, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ12363 BINDING SITE, designated SEQ ID:766, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54431] Another function of GAM7809 is therefore inhibition of FLJ12363 (Accession NP_115543.1) . Accordingly, utilities

of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ12363.

[54432] FLJ22833 (Accession NP_073748.1) is another GAM7809 target gene, herein designated TARGET GENE. FLJ22833 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ22833, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ22833 BINDING SITE, designated SEQ ID:4756, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54433] Another function of GAM7809 is therefore inhibition of FLJ22833 (Accession NP_073748.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ22833.

[54434] Forkhead box p1 (FOXP1, Accession NP_116071.2) is another GAM7809 target gene, herein designated TARGET GENE. FOXP1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FOXP1, corresponding to a target binding site such as BINDING

SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FOXP1 BINDING SITE, designated SEQ ID:4211, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54435] Another function of GAM7809 is therefore inhibition of Forkhead box p1 (FOXP1, Accession NP_116071.2) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FOXP1.

[54436] HGNT-IV-H (Accession NP_037376.1) is another GAM7809 target gene, herein designated TARGET GENE. HGNT-IV-H BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HGNT-IV-H, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HGNT-IV-H BINDING SITE, designated SEQ ID:8444, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54437] Another function of GAM7809 is therefore inhibition of HGNT-IV-H (Accession NP_037376.1) . Accordingly, utili-

ties of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HGNT-IV-H.

[54438] Histamine n-methyltransferase (HNMT, Accession NP_008826.1) is another GAM7809 target gene, herein designated TARGET GENE. HNMT BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HNMT, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HNMT BINDING SITE, designated SEQ ID:558, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54439] Another function of GAM7809 is therefore inhibition of Histamine n-methyltransferase (HNMT, Accession NP_008826.1), a gene which inactivates histamine by n-methylation and therefore may be associated with Caucasian asthmatic. Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of Caucasian asthmatic, and of other diseases and clinical conditions associated with HNMT.

[54440] The function of HNMT and its association with various diseases and clinical conditions, has been established by

previous studies, as described hereinabove with reference to GAM1926.2.HSMPP8 (Accession XP_167894.1) is another GAM7809 target gene, herein designated TARGET GENE. HSMPP8 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HSMPP8, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HSMPP8 BINDING SITE, designated SEQ ID:14992, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54441] Another function of GAM7809 is therefore inhibition of HSMPP8 (Accession XP_167894.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HSMPP8.

[54442] Integrin, beta 2 (antigen cd18 (p95), lymphocyte function-associated antigen 1; macrophage antigen 1 (mac-1) beta subunit) (ITGB2, Accession NP_000202.1) is another GAM7809 target gene, herein designated TARGET GENE. ITGB2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ITGB2, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ITGB2 BINDING SITE, designated SEQ ID:2700, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54443] Another function of GAM7809 is therefore inhibition of Integrin, beta 2 (antigen cd18 (p95), lymphocyte function-associated antigen 1; macrophage antigen 1 (mac-1) beta subunit) (ITGB2, Accession NP_000202.1), a gene which is involved in cell-cell and cell-matrix interactions. and therefore is associated with Leukocyte adhesion deficiency. Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of Leukocyte adhesion deficiency, and of other diseases and clinical conditions associated with ITGB2.

[54444] The function of ITGB2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM842.2.KIAA0471 (Accession NP_055672.1) is another GAM7809 target gene, herein designated TARGET GENE. KIAA0471 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by

KIAA0471, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0471 BINDING SITE, designated SEQ ID:9743, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54445] Another function of GAM7809 is therefore inhibition of KIAA0471 (Accession NP_055672.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0471.

[54446] KIAA0746 (Accession XP_045277.3) is another GAM7809 target gene, herein designated TARGET GENE. KIAA0746 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by KIAA0746, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0746 BINDING SITE, designated SEQ ID:6982, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54447] Another function of GAM7809 is therefore inhibition of

KIAA0746 (Accession XP_045277.3) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0746.

[54448] KIAA1018 (Accession NP_055782.1) is another GAM7809 target gene, herein designated TARGET GENE. KIAA1018 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1018, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1018 BINDING SITE, designated SEQ ID:12780, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54449] Another function of GAM7809 is therefore inhibition of KIAA1018 (Accession NP_055782.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1018.

[54450] KIAA1671 (Accession XP_037809.1) is another GAM7809 target gene, herein designated TARGET GENE. KIAA1671 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1671, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1671 BINDING SITE, designated SEQ ID:7267, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54451] Another function of GAM7809 is therefore inhibition of KIAA1671 (Accession XP_037809.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1671.

[54452] KIAA1726 (Accession XP_040860.3) is another GAM7809 target gene, herein designated TARGET GENE. KIAA1726 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1726, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1726 BINDING SITE, designated SEQ ID:9351, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54453] Another function of GAM7809 is therefore inhibition of KIAA1726 (Accession XP_040860.3) . Accordingly, utilities

of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1726.

[54454] LOC121838 (Accession XP_071772.1) is another GAM7809 target gene, herein designated TARGET GENE. LOC121838 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC121838, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC121838 BINDING SITE, designated SEQ ID:17414, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54455] Another function of GAM7809 is therefore inhibition of LOC121838 (Accession XP_071772.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC121838.

[54456] LOC130536 (Accession XP_065771.1) is another GAM7809 target gene, herein designated TARGET GENE. LOC130536 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by

LOC130536, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC130536 BINDING SITE, designated SEQ ID:15342, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54457] Another function of GAM7809 is therefore inhibition of LOC130536 (Accession XP_065771.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC130536.

[54458] LOC148709 (Accession XP_086281.1) is another GAM7809 target gene, herein designated TARGET GENE. LOC148709 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC148709, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC148709 BINDING SITE, designated SEQ ID:19661, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54459] Another function of GAM7809 is therefore inhibition of LOC148709 (Accession XP_086281.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC148709.

[54460] LOC149600 (Accession XP_097686.1) is another GAM7809 target gene, herein designated TARGET GENE. LOC149600 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC149600, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC149600 BINDING SITE, designated SEQ ID:15051, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54461] Another function of GAM7809 is therefore inhibition of LOC149600 (Accession XP_097686.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC149600.

[54462] LOC151057 (Accession XP_097998.1) is another GAM7809 target gene, herein designated TARGET GENE.

LOC151057 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC151057, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC151057 BINDING SITE, designated SEQ ID:6610, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54463] Another function of GAM7809 is therefore inhibition of LOC151057 (Accession XP_097998.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC151057.

[54464] LOC152200 (Accession XP_098174.1) is another GAM7809 target gene, herein designated TARGET GENE. LOC152200 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC152200, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC152200 BINDING SITE, designated SEQ ID:19176, to the nucleotide sequence of

GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54465] Another function of GAM7809 is therefore inhibition of LOC152200 (Accession XP_098174.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC152200.

[54466] LOC157503 (Accession XP_098767.1) is another GAM7809 target gene, herein designated TARGET GENE. LOC157503 BINDING SITE1 and LOC157503 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC157503, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC157503 BINDING SITE1 and LOC157503 BINDING SITE2, designated SEQ ID:10657 and SEQ ID:20114 respectively, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54467] Another function of GAM7809 is therefore inhibition of LOC157503 (Accession XP_098767.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC157503.

[54468] LOC157567 (Accession XP_088328.1) is another GAM7809 target gene, herein designated TARGET GENE. LOC157567 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC157567, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC157567 BINDING SITE, designated SEQ ID:1783, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54469] Another function of GAM7809 is therefore inhibition of LOC157567 (Accession XP_088328.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC157567.

[54470] LOC283007 (Accession XP_210849.1) is another GAM7809 target gene, herein designated TARGET GENE. LOC283007 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC283007, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283007 BINDING SITE, designated SEQ ID:14565, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54471] Another function of GAM7809 is therefore inhibition of LOC283007 (Accession XP_210849.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283007.

[54472] LOC283641 (Accession XP_208764.1) is another GAM7809 target gene, herein designated TARGET GENE. LOC283641 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283641, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283641 BINDING SITE, designated SEQ ID:9650, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54473] Another function of GAM7809 is therefore inhibition of LOC283641 (Accession XP_208764.1) . Accordingly, utili-

ties of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283641.

[54474] LOC284019 (Accession XP_211302.1) is another GAM7809 target gene, herein designated TARGET GENE. LOC284019 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284019, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284019 BINDING SITE, designated SEQ ID:16558, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54475] Another function of GAM7809 is therefore inhibition of LOC284019 (Accession XP_211302.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284019.

[54476] LOC284394 (Accession XP_210786.1) is another GAM7809 target gene, herein designated TARGET GENE. LOC284394 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by

LOC284394, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284394 BINDING SITE, designated SEQ ID:9920, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54477] Another function of GAM7809 is therefore inhibition of LOC284394 (Accession XP_210786.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284394.

[54478] LOC285219 (Accession XP_209518.1) is another GAM7809 target gene, herein designated TARGET GENE. LOC285219 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC285219, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285219 BINDING SITE, designated SEQ ID:5963, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54479] Another function of GAM7809 is therefore inhibition of LOC285219 (Accession XP_209518.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285219.

[54480] LOC285483 (Accession XP_209631.1) is another GAM7809 target gene, herein designated TARGET GENE. LOC285483 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285483, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285483 BINDING SITE, designated SEQ ID:6690, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54481] Another function of GAM7809 is therefore inhibition of LOC285483 (Accession XP_209631.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285483.

[54482] LOC286039 (Accession XP_209873.1) is another GAM7809 target gene, herein designated TARGET GENE.

LOC286039 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC286039, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286039 BINDING SITE, designated SEQ ID:2701, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54483] Another function of GAM7809 is therefore inhibition of LOC286039 (Accession XP_209873.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286039.

[54484] LOC286163 (Accession XP_209922.1) is another GAM7809 target gene, herein designated TARGET GENE. LOC286163 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286163, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286163 BINDING SITE, designated SEQ ID:16153, to the nucleotide sequence of

GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54485] Another function of GAM7809 is therefore inhibition of LOC286163 (Accession XP_209922.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286163.

[54486] LOC286425 (Accession XP_208420.1) is another GAM7809 target gene, herein designated TARGET GENE. LOC286425 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC286425, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286425 BINDING SITE, designated SEQ ID:13979, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54487] Another function of GAM7809 is therefore inhibition of LOC286425 (Accession XP_208420.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286425.

[54488] LOC338558 (Accession XP_290465.1) is another GAM7809 target gene, herein designated TARGET GENE. LOC338558 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC338558, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338558 BINDING SITE, designated SEQ ID:15746, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54489] Another function of GAM7809 is therefore inhibition of LOC338558 (Accession XP_290465.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC338558.

[54490] LOC340184 (Accession XP_295183.1) is another GAM7809 target gene, herein designated TARGET GENE. LOC340184 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC340184, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC340184 BINDING SITE, designated SEQ ID:8010, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54491] Another function of GAM7809 is therefore inhibition of LOC340184 (Accession XP_295183.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340184.

[54492] LOC340408 (Accession XP_291274.1) is another GAM7809 target gene, herein designated TARGET GENE. LOC340408 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC340408, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340408 BINDING SITE, designated SEQ ID:2701, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54493] Another function of GAM7809 is therefore inhibition of LOC340408 (Accession XP_291274.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC340408.

[54494] LOC340852 (Accession XP_291740.1) is another GAM7809 target gene, herein designated TARGET GENE. LOC340852 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC340852, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340852 BINDING SITE, designated SEQ ID:19394, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54495] Another function of GAM7809 is therefore inhibition of LOC340852 (Accession XP_291740.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340852.

[54496] LOC345119 (Accession XP_298539.1) is another GAM7809 target gene, herein designated TARGET GENE. LOC345119 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC345119, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC345119 BINDING SITE, designated SEQ ID:5096, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54497] Another function of GAM7809 is therefore inhibition of LOC345119 (Accession XP_298539.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC345119.

[54498] LOC346653 (Accession XP_294357.2) is another GAM7809 target gene, herein designated TARGET GENE. LOC346653 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC346653, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC346653 BINDING SITE, designated SEQ ID:18192, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54499] Another function of GAM7809 is therefore inhibition of

LOC346653 (Accession XP_294357.2) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC346653.

[54500] LOC349289 (Accession XP_300477.1) is another GAM7809 target gene, herein designated TARGET GENE. LOC349289 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC349289, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349289 BINDING SITE, designated SEQ ID:9015, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54501] Another function of GAM7809 is therefore inhibition of LOC349289 (Accession XP_300477.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349289.

[54502] LOC56906 (Accession NP_064532.1) is another GAM7809 target gene, herein designated TARGET GENE. LOC56906 BINDING SITE is a target binding site found in the 3' un-

translated region of mRNA encoded by LOC56906, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC56906 BINDING SITE, designated SEQ ID:16105, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54503] Another function of GAM7809 is therefore inhibition of LOC56906 (Accession NP_064532.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC56906.

[54504] LOC92912 (Accession NP_775740.1) is another GAM7809 target gene, herein designated TARGET GENE. LOC92912 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC92912, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC92912 BINDING SITE, designated SEQ ID:11212, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54505] Another function of GAM7809 is therefore inhibition of

LOC92912 (Accession NP_775740.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC92912.

[54506] MEGF11 (Accession NP_115821.1) is another GAM7809 target gene, herein designated TARGET GENE. MEGF11 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MEGF11, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MEGF11 BINDING SITE, designated SEQ ID:9381, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54507] Another function of GAM7809 is therefore inhibition of MEGF11 (Accession NP_115821.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MEGF11.

[54508] MGC14407 (Accession NP_116297.1) is another GAM7809 target gene, herein designated TARGET GENE. MGC14407 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC14407, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC14407 BINDING SITE, designated SEQ ID:10181, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54509] Another function of GAM7809 is therefore inhibition of MGC14407 (Accession NP_116297.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC14407.

[54510] MGC19556 (Accession NP_291029.1) is another GAM7809 target gene, herein designated TARGET GENE. MGC19556 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MGC19556, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC19556 BINDING SITE, designated SEQ ID:4710, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54511] Another function of GAM7809 is therefore inhibition of MGC19556 (Accession NP_291029.1) . Accordingly, utili-

ties of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC19556.

[54512] MGC26647 (Accession NP_689919.1) is another GAM7809 target gene, herein designated TARGET GENE. MGC26647 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MGC26647, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC26647 BINDING SITE, designated SEQ ID:11055, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54513] Another function of GAM7809 is therefore inhibition of MGC26647 (Accession NP_689919.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC26647.

[54514] MGC39616 (Accession NP_775847.1) is another GAM7809 target gene, herein designated TARGET GENE. MGC39616 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC39616, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC39616 BINDING SITE, designated SEQ ID:4954, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54515] Another function of GAM7809 is therefore inhibition of MGC39616 (Accession NP_775847.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC39616.

[54516] MGC4737 (Accession NP_113654.1) is another GAM7809 target gene, herein designated TARGET GENE. MGC4737 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MGC4737, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC4737 BINDING SITE, designated SEQ ID:13111, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54517] Another function of GAM7809 is therefore inhibition of MGC4737 (Accession NP_113654.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment

of diseases and clinical conditions associated with MGC4737.

[54518] Mhc class ii transactivator (MHC2TA, Accession NP_000237.1) is another GAM7809 target gene, herein designated TARGET GENE. MHC2TA BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MHC2TA, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MHC2TA BINDING SITE, designated SEQ ID:16477, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54519] Another function of GAM7809 is therefore inhibition of Mhc class ii transactivator (MHC2TA, Accession NP_000237.1). Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MHC2TA.

[54520] Mki67 (fha domain) interacting nucleolar phosphoprotein (MKI67IP, Accession NP_115766.2) is another GAM7809 target gene, herein designated TARGET GENE. MKI67IP BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MKI67IP, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MKI67IP BINDING SITE, designated SEQ ID:14713, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54521] Another function of GAM7809 is therefore inhibition of Mki67 (fha domain) interacting nucleolar phosphoprotein (MKI67IP, Accession NP_115766.2) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MKI67IP.

[54522] Membrane-spanning 4-domains, subfamily a, member 6a (MS4A6A, Accession NP_071744.2) is another GAM7809 target gene, herein designated TARGET GENE. MS4A6A BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by MS4A6A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MS4A6A BINDING SITE, designated SEQ ID:9874, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ

ID:398.

[54523] Another function of GAM7809 is therefore inhibition of Membrane-spanning 4-domains, subfamily a, member 6a (MS4A6A, Accession NP_071744.2), a gene which binds to the fc region of immunoglobulins epsilon. Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MS4A6A.

[54524] The function of MS4A6A and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM180.1.NET-2 (Accession NP_036470.1) is another GAM7809 target gene, herein designated TARGET GENE. NET-2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by NET-2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NET-2 BINDING SITE, designated SEQ ID:14668, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54525] Another function of GAM7809 is therefore inhibition of NET-2 (Accession NP_036470.1) . Accordingly, utilities of

GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NET-2.

[54526] Nuclear factor i/b (NFIB, Accession NP_005587.1) is another GAM7809 target gene, herein designated TARGET GENE. NFIB BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by NFIB, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NFIB BINDING SITE, designated SEQ ID:1182, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54527] Another function of GAM7809 is therefore inhibition of Nuclear factor i/b (NFIB, Accession NP_005587.1), a gene which recognizes and binds the palindromic sequence 5'-ttggcnnnnngccaa- 3' present in viral and cellular promoters. Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NFIB.

[54528] The function of NFIB and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM94.1. Neurotrophic tyrosine kinase, receptor, type 2

(NTRK2, Accession NP_006171.2) is another GAM7809 target gene, herein designated TARGET GENE. NTRK2 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by NTRK2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NTRK2 BINDING SITE, designated SEQ ID:9600, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54529] Another function of GAM7809 is therefore inhibition of Neurotrophic tyrosine kinase, receptor, type 2 (NTRK2, Accession NP_006171.2), a gene which is involved in the development and/or maintenance of the nervous system. Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NTRK2.

[54530] The function of NTRK2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM120.1.NY-REN-25 (Accession XP_027116.6) is another GAM7809 target gene, herein designated TARGET GENE. NY-REN-25 BINDING SITE is a target binding site

found in the 3' untranslated region of mRNA encoded by NY-REN-25, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NY-REN-25 BINDING SITE, designated SEQ ID:14494, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54531] Another function of GAM7809 is therefore inhibition of NY-REN-25 (Accession XP_027116.6) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NY-REN-25.

[54532] NYD-SP11 (Accession NP_114157.2) is another GAM7809 target gene, herein designated TARGET GENE. NYD-SP11 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by NYD-SP11, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NYD-SP11 BINDING SITE, designated SEQ ID:19585, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54533] Another function of GAM7809 is therefore inhibition of NYD-SP11 (Accession NP_114157.2) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NYD-SP11.

[54534] OTO3 (Accession XP_292588.2) is another GAM7809 target gene, herein designated TARGET GENE. OTO3 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by OTO3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of OTO3 BINDING SITE, designated SEQ ID:17220, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54535] Another function of GAM7809 is therefore inhibition of OTO3 (Accession XP_292588.2) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with OTO3.

[54536] Piccolo (presynaptic cytomatrix protein) (PCLO, Accession XP_168530.1) is another GAM7809 target gene, herein designated TARGET GENE. PCLO BINDING SITE is a target binding site found in the 3` untranslated region of mRNA

encoded by PCLO, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PCLO BINDING SITE, designated SEQ ID:17329, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54537] Another function of GAM7809 is therefore inhibition of Piccolo (presynaptic cytomatrix protein) (PCLO, Accession XP_168530.1), a gene which involves in the cycling of synaptic vesicles. Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PCLO.

[54538] The function of PCLO and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM133.2. Platelet-derived growth factor receptor, beta polypeptide (PDGFRB, Accession NP_002600.1) is another GAM7809 target gene, herein designated TARGET GENE. PDGFRB BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by PDGFRB, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 il-

illustrates the complementarity of the nucleotide sequences of PDGFRB BINDING SITE, designated SEQ ID:8445, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54539] Another function of GAM7809 is therefore inhibition of Platelet-derived growth factor receptor, beta polypeptide (PDGFRB, Accession NP_002600.1), a gene which Platelet-derived growth factor receptor beta chain; tyrosine kinase receptor. and therefore may be associated with Chronic myeloproliferative diseases. Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of Chronic myeloproliferative diseases, and of other diseases and clinical conditions associated with PDGFRB.

[54540] The function of PDGFRB and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM579.1.PDZK3 (Accession NP_835260.1) is another GAM7809 target gene, herein designated TARGET GENE. PDZK3 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PDZK3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the

nucleotide sequences of PDZK3 BINDING SITE, designated SEQ ID:13968, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54541] Another function of GAM7809 is therefore inhibition of PDZK3 (Accession NP_835260.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PDZK3.

[54542] PDZK3 (Accession NP_055837.2) is another GAM7809 target gene, herein designated TARGET GENE. PDZK3 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PDZK3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PDZK3 BINDING SITE, designated SEQ ID:13968, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54543] Another function of GAM7809 is therefore inhibition of PDZK3 (Accession NP_055837.2) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PDZK3.

[54544] Phytanoyl-coa hydroxylase interacting protein (PHYHIP, Accession NP_055574.1) is another GAM7809 target gene, herein designated TARGET GENE. PHYHIP BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PHYHIP, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PHYHIP BINDING SITE, designated SEQ ID:4208, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54545] Another function of GAM7809 is therefore inhibition of Phytanoyl-coa hydroxylase interacting protein (PHYHIP, Accession NP_055574.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PHYHIP.

[54546] PRO0365 (Accession NP_054845.1) is another GAM7809 target gene, herein designated TARGET GENE. PRO0365 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PRO0365, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

PRO0365 BINDING SITE, designated SEQ ID:15355, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54547] Another function of GAM7809 is therefore inhibition of PRO0365 (Accession NP_054845.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PRO0365.

[54548] Prp4 pre-mrna processing factor 4 homolog b (yeast) (PRPF4B, Accession NP_003904.2) is another GAM7809 target gene, herein designated TARGET GENE. PRPF4B BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PRPF4B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PRPF4B BINDING SITE, designated SEQ ID:11905, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54549] Another function of GAM7809 is therefore inhibition of Prp4 pre-mrna processing factor 4 homolog b (yeast) (PRPF4B, Accession NP_003904.2) . Accordingly, utilities

of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PRPF4B.

[54550] Protein tyrosine phosphatase, receptor type, h (PTPRH, Accession NP_002833.1) is another GAM7809 target gene, herein designated TARGET GENE. PTPRH BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PTPRH, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PTPRH BINDING SITE, designated SEQ ID:14651, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54551] Another function of GAM7809 is therefore inhibition of Protein tyrosine phosphatase, receptor type, h (PTPRH, Accession NP_002833.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PTPRH.

[54552] Ran binding protein 17 (RANBP17, Accession NP_075048.1) is another GAM7809 target gene, herein designated TARGET GENE. RANBP17 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RANBP17, corresponding to a target

binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RANBP17 BINDING SITE, designated SEQ ID:18307, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54553] Another function of GAM7809 is therefore inhibition of Ran binding protein 17 (RANBP17, Accession NP_075048.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RANBP17.

[54554] Reversion-inducing-cysteine-rich protein with kazal motifs (RECK, Accession NP_066934.1) is another GAM7809 target gene, herein designated TARGET GENE. RECK BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RECK, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RECK BINDING SITE, designated SEQ ID:6244, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54555] Another function of GAM7809 is therefore inhibition of

Reversion-inducing-cysteine-rich protein with kazal motifs (RECK, Accession NP_066934.1), a gene which plays a role in regulation of cancer progression and tumor angiogenesis. and therefore may be associated with Cancerous tumors. Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of Cancerous tumors, and of other diseases and clinical conditions associated with RECK.

[54556] The function of RECK and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM377.1. Serologically defined colon cancer antigen 33 (SDCCAG33, Accession NP_005777.2) is another GAM7809 target gene, herein designated TARGET GENE. SDCCAG33 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SDCCAG33, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SDCCAG33 BINDING SITE, designated SEQ ID:6557, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54557] Another function of GAM7809 is therefore inhibition of Serologically defined colon cancer antigen 33 (SDCCAG33, Accession NP_005777.2) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SD-CCAG33.

[54558] Splicing factor, arginine/serine-rich 11 (SFRS11, Accession NP_004759.1) is another GAM7809 target gene, herein designated TARGET GENE. SFRS11 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SFRS11, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SFRS11 BINDING SITE, designated SEQ ID:14777, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54559] Another function of GAM7809 is therefore inhibition of Splicing factor, arginine/serine-rich 11 (SFRS11, Accession NP_004759.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SFRS11.

[54560] Sry (sex determining region y)-box 5 (SOX5, Accession

NP_694534.1) is another GAM7809 target gene, herein designated TARGET GENE. SOX5 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by SOX5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SOX5 BINDING SITE, designated SEQ ID:9808, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54561] Another function of GAM7809 is therefore inhibition of Sry (sex determining region y)-box 5 (SOX5, Accession NP_694534.1), a gene which binds specifically to the dna sequence 5'- aacaat- 3'. Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SOX5.

[54562] The function of SOX5 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM488.1.Sry (sex determining region y)-box 5 (SOX5, Accession NP_008871.3) is another GAM7809 target gene, herein designated TARGET GENE. SOX5 BINDING SITE is a target binding site found in the 3' untranslated region of

multiple transcripts of mRNA encoded by SOX5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SOX5 BINDING SITE, designated SEQ ID:9808, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54563] Another function of GAM7809 is therefore inhibition of Sry (sex determining region y)-box 5 (SOX5, Accession NP_008871.3), a gene which binds specifically to the dna sequence 5'- aacaat- 3'. Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SOX5.

[54564] The function of SOX5 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM488.1.Sry (sex determining region y)-box 5 (SOX5, Accession NP_821078.1) is another GAM7809 target gene, herein designated TARGET GENE. SOX5 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by SOX5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of SOX5 BINDING SITE, designated SEQ ID:9808, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54565] Another function of GAM7809 is therefore inhibition of Sry (sex determining region y)-box 5 (SOX5, Accession NP_821078.1), a gene which binds specifically to the dna sequence 5'- aacaat- 3'. Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SOX5.

[54566] The function of SOX5 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM488.1.Sparc/osteonectin, cwcv and kazal-like domains proteoglycan (testican) (SPOCK, Accession NP_004589.1) is another GAM7809 target gene, herein designated TARGET GENE. SPOCK BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SPOCK, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SPOCK BINDING SITE, designated SEQ ID:10241, to the nucleotide sequence of GAM7809

RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54567] Another function of GAM7809 is therefore inhibition of Sparc/osteonectin, cwcv and kazal-like domains proteoglycan (testican) (SPOCK, Accession NP_004589.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SPOCK.

[54568] SRGAP2 (Accession NP_055665.1) is another GAM7809 target gene, herein designated TARGET GENE. SRGAP2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SRGAP2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SRGAP2 BINDING SITE, designated SEQ ID:14316, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54569] Another function of GAM7809 is therefore inhibition of SRGAP2 (Accession NP_055665.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SRGAP2.

[54570] STAF65(gamma) (Accession NP_055675.1) is another GAM7809 target gene, herein designated TARGET GENE. STAF65(gamma) BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by STAF65(gamma), corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of STAF65(gamma) BINDING SITE, designated SEQ ID:1623, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54571] Another function of GAM7809 is therefore inhibition of STAF65(gamma) (Accession NP_055675.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with STAF65(gamma).

[54572] Start domain containing 4, sterol regulated (STARD4, Accession NP_631903.1) is another GAM7809 target gene, herein designated TARGET GENE. STARD4 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by STARD4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the comple-

mentarity of the nucleotide sequences of STARD4 BINDING SITE, designated SEQ ID:7431, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54573] Another function of GAM7809 is therefore inhibition of Start domain containing 4, sterol regulated (STARD4, Accession NP_631903.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with STARD4.

[54574] Taf1-like rna polymerase ii, tata box binding protein (tbp)-associated factor, 210kda (TAF1L, Accession NP_722516.1) is another GAM7809 target gene, herein designated TARGET GENE. TAF1L BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TAF1L, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TAF1L BINDING SITE, designated SEQ ID:10086, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54575] Another function of GAM7809 is therefore inhibition of Taf1-like rna polymerase ii, tata box binding protein

(tbp)-associated factor, 210kda (TAF1L, Accession NP_722516.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TAF1L.

[54576] Transforming growth factor, beta-induced, 68kda (TGFB1, Accession NP_000349.1) is another GAM7809 target gene, herein designated TARGET GENE. TGFB1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TGFB1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TGFB1 BINDING SITE, designated SEQ ID:14063, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54577] Another function of GAM7809 is therefore inhibition of Transforming growth factor, beta-induced, 68kda (TGFB1, Accession NP_000349.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TGFB1.

[54578] Ttk protein kinase (TTK, Accession NP_003309.2) is another GAM7809 target gene, herein designated TARGET GENE. TTK BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by TTK, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TTK BINDING SITE, designated SEQ ID:10374, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54579] Another function of GAM7809 is therefore inhibition of Ttk protein kinase (TTK, Accession NP_003309.2), a gene which phosphorylates proteins on serine, threonine, and tyrosine; and is probably associated with cell proliferation. Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TTK.

[54580] The function of TTK has been established by previous studies. Using *Xenopus* egg extracts, Abrieu et al. (2001) isolated a homolog of yeast Mps1 and showed that it is a kinetochore-associated kinase whose activity is necessary to establish and maintain the mitotic checkpoint. Since high levels of Mad2 (OMIM Ref. No. 601467) overcame checkpoint loss in Mps1-depleted extracts, Mps1 acts upstream of Mad2-mediated inhibition of the anaphase-promoting complex/cyclosome (APC/C). The authors

stated that Mps1 is essential for the checkpoint because it is required for recruitment and retention of active CENPE (OMIM Ref. No. 117143) at kinetochores, which in turn is necessary for kinetochore association of Mad1 (OMIM Ref. No. 602686) and Mad2. Fisk and Winey (2001) demonstrated that the mouse Mps1 ortholog, Esk, regulates centrosome duplication. Endogenous Esk and overexpressed GFP-Esk localized to centrosomes and kinetochores in mouse cells. Overexpression of GFP-Esk caused reduplication of centrosomes during S-phase arrest. In contrast, a kinase-deficient mutant blocked centrosome duplication altogether. The authors found that control of centrosome duplication by Esk requires Cdk2 (OMIM Ref. No. 116953). Inhibition of Cdk2 prevented centrosome reduplication and destabilized Esk, causing its subsequent loss from centrosomes, suggesting that Cdk2 promotes the centrosome duplication function of Esk by regulating its stability during S phase. Thus, Esk, an in vitro Cdk2 substrate, regulates centrosome duplication jointly with Cdk2.

[54581]

[54582] Full details of the abovementioned studies are described in the following publications, the disclosure of which are hereby incorporated by reference:

[54583] Abrieu, A.; Magnaghi- Jaulin, L.; Kahana, J. A.; Peter, M.; Castro, A.; Vigneron, S.; Lorca, T.; Cleveland, D. W.; Labbe, J.- C. : Mps1 is a kinetochore- associated kinase essential for the vertebrate mitotic checkpoint. Cell 106: 83- 93, 2001. ; and

[54584] Fisk, H. A.; Winey, M. : The mouse Mps1p- like kinase regulates centrosome duplication. Cell 106: 95- 104, 2001.

[54585] Further studies establishing the function and utilities of TTK are found in John Hopkins OMIM database record ID 604092, and in cited publications listed in Table 5, which are hereby incorporated by reference. Udp-n-acteylglucosamine pyrophosphorylase 1 (UAP1, Accession NP_003106.2) is another GAM7809 target gene, herein designated TARGET GENE. UAP1 BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by UAP1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of UAP1 BINDING SITE, designated SEQ ID:14376, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54586] Another function of GAM7809 is therefore inhibition of Udp-n-acteylglucosamine pyrophosphorylase 1 (UAP1, Accession NP_003106.2) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with UAP1.

[54587] Williams beuren syndrome chromosome region 21 (WBSCR21, Accession NP_683713.1) is another GAM7809 target gene, herein designated TARGET GENE. WBSCR21 BINDING SITE is a target binding site found in the 3` un-translated region of multiple transcripts of mRNA encoded by WBSCR21, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of WBSCR21 BINDING SITE, designated SEQ ID:9104, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54588] Another function of GAM7809 is therefore inhibition of Williams beuren syndrome chromosome region 21 (WBSCR21, Accession NP_683713.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with WB-SCR21.

[54589] Williams beuren syndrome chromosome region 21 (WBSCR21, Accession NP_112585.2) is another GAM7809 target gene, herein designated TARGET GENE. WBSCR21 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by WBSCR21, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of WBSCR21 BINDING SITE, designated SEQ ID:9104, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54590] Another function of GAM7809 is therefore inhibition of Williams beuren syndrome chromosome region 21 (WBSCR21, Accession NP_112585.2) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with WBSCR21.

[54591] WFDC13 (Accession NP_742002.1) is another GAM7809 target gene, herein designated TARGET GENE. WFDC13 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by WFDC13, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of WFDC13 BINDING SITE, designated SEQ ID:17697, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54592] Another function of GAM7809 is therefore inhibition of WFDC13 (Accession NP_742002.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with WFDC13.

[54593] ZBTB1 (Accession NP_055765.1) is another GAM7809 target gene, herein designated TARGET GENE. ZBTB1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZBTB1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZBTB1 BINDING SITE, designated SEQ ID:19264, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54594] Another function of GAM7809 is therefore inhibition of ZBTB1 (Accession NP_055765.1) . Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of

diseases and clinical conditions associated with ZBTB1.

[54595] Zinc finger protein 228 (ZNF228, Accession NP_037512.1) is another GAM7809 target gene, herein designated TARGET GENE. ZNF228 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZNF228, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF228 BINDING SITE, designated SEQ ID:14011, to the nucleotide sequence of GAM7809 RNA, herein designated GAM RNA, also designated SEQ ID:398.

[54596] Another function of GAM7809 is therefore inhibition of Zinc finger protein 228 (ZNF228, Accession NP_037512.1). Accordingly, utilities of GAM7809 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF228.

[54597]

[54598] Fig. 8 further provides a conceptual description of a novel bioinformatically detected of the present invention, referred to here as Genomic Address Messenger 7933 (GAM7933), which modulates expression of respective target genes thereof, the function and utility of which tar-

get genes is known in the art.

[54599] GAM7933 is a novel bioinformatically detected regulatory, non protein coding, micro RNA (miRNA) gene. The method by which GAM7933 was detected is described hereinabove with reference to Figs. 8–15.

[54600] GAM7933 gene, herein designated GAM GENE, and GAM7933 target gene, herein designated TARGET GENE, are human genes contained in the human genome.

[54601] GAM7933 gene encodes a GAM7933 precursor RNA, herein designated GAM PRECURSOR RNA. Similar to other miRNA genes, and unlike most ordinary genes, GAM7933 precursor RNA does not encode a protein. A nucleotide sequence identical or highly similar to the nucleotide sequence of GAM7933 precursor RNA is designated SEQ ID:145, and is provided hereinbelow with reference to the sequence listing part. Nucleotide sequence SEQ ID:145 is located at position 3260217 relative to chromosome 7.

[54602] GAM7933 precursor RNA folds onto itself, forming GAM7933 folded precursor RNA, herein designated GAM FOLDED PRECURSOR RNA, which has a two-dimensional `hairpin structure`. As is well known in the art, this `hairpin structure`, is typical of RNA encoded by miRNA genes, and is due to the fact that the nucleotide sequence

of the first half of the RNA encoded by a miRNA gene is an accurate or partial inversed-reversed sequence of the nucleotide sequence of the second half thereof.

[54603] GAM7933 precursor RNA folds onto itself, forming GAM7933 folded precursor RNA, herein designated GAM FOLDED PRECURSOR RNA, which has a two-dimensional `hairpin structure`. As is well known in the art, this `hairpin structure`, is typical of RNA encoded by miRNA genes, and is due to the fact that the nucleotide sequence of the first half of the RNA encoded by a miRNA gene is an accurate or partial reverse-complementary sequence of the nucleotide sequence of the second half thereof.

[54604] Nucleotide sequence of GAM7933 precursor RNA, designated SEQ-ID: 145, and a schematic representation of a predicted secondary folding of GAM7933 folded precursor RNA are further described with reference to Table 2, hereby incorporated by reference.

[54605] An enzyme complex designated DICER COMPLEX, `dices` the GAM7933 folded precursor RNA into GAM7933 RNA, herein designated GAM RNA, a single stranded ~22 nt long RNA segment. As is known in the art, `dicing` of a hairpin structured RNA precursor product into a short ~22nt RNA segment is catalyzed by an enzyme complex

comprising an enzyme called Dicer together with other necessary proteins. A probable (GAM Prediction Accuracy Group: A) nucleotide sequence of GAM7933 RNA is designated SEQ ID:203, and is provided hereinbelow with references to the sequence listing part and Table 3, hereby incorporated by reference.

[54606] GAM7933 target gene, herein designated TARGET GENE, encodes a corresponding messenger RNA, GAM7933 target RNA, herein designated GAM TARGET RNA. GAM7933 target RNA comprises three regions, as is typical of mRNA of a protein coding gene: a 5' untranslated region, a protein coding region and a 3' untranslated region, designated 5'UTR, PROTEIN CODING and 3'UTR respectively.

[54607] GAM7933 RNA, herein designated GAM RNA, binds complementarily to one or more target binding sites located in untranslated regions of GAM7933 target RNA, herein designated GAM TARGET RNA. This complementary binding is due to the fact that the nucleotide sequence of GAM7933 RNA is an accurate or a partial inversed-reversed sequence of the nucleotide sequence of each of the target binding sites. As an illustration, Fig. 8 shows three such target binding sites, designated BINDING SITE I, BINDING SITE II and BINDING SITE III respectively. It is appreciated

that the number of target binding sites shown in Fig. 8 is meant as an illustration only, and is not meant to be limiting. GAM7933 RNA may have a different number of target binding sites in untranslated regions of a GAM7933 target RNA. It is further appreciated that while Fig. 8 depicts target binding sites in the 3'UTR region, this is meant as an example only these target binding sites may be located in the 3'UTR region, the 5'UTR region, or in both 3'UTR and 5'UTR regions.

[54608] The complementary binding of GAM7933 RNA, herein designated GAM RNA, to target binding sites on GAM7933 target RNA, herein designated GAM TARGET RNA, such as BINDING SITE I, BINDING SITE II and BINDING SITE III, inhibits translation of GAM7933 target RNA into GAM7933 target protein, herein designated GAM TARGET PROTEIN. GAM target protein is therefore outlined by a broken line.

[54609] It is appreciated that GAM7933 target gene, herein designated TARGET GENE, in fact represents a plurality of GAM7933 target genes. The mRNA of each one of this plurality of GAM7933 target genes comprises one or more target binding sites, each having a nucleotide sequence which is at least partly complementary to GAM7933 RNA, herein designated GAM RNA, and which when bound by

GAM7933 RNA causes inhibition of translation of respective one or more GAM7933 target proteins.

[54610] It is further appreciated by one skilled in the art that the mode of translational inhibition illustrated by Fig. 8 with specific reference to translational inhibition exerted by GAM7933 gene, herein designated GAM GENE, on one or more GAM7933 target genes, herein collectively designated TARGET GENE, is common to other known miRNA genes. As mentioned hereinabove with reference to the background section, although a specific complementary binding site has been demonstrated only for some of the known miRNA genes (primarily Lin-4 and Let-7), all other recently discovered miRNA genes are also believed by those skilled in the art to modulate expression of other genes by complementary binding, although specific complementary binding sites of these other miRNA genes have not yet been found (Ruvkun G., Perspective: Glimpses of a tiny RNA world, Science 294,779 (2001)).

[54611] It is appreciated that specific functions and accordingly utilities of GAM7933 correlate with, and may be deduced from, the identity of the target genes which GAM7933 binds and inhibits, and the function of these target genes, as elaborated hereinbelow.

[54612]

[54613]

[54614] A disintegrin and metalloproteinase domain 10 (ADAM10, Accession NP_001101.1) is a GAM7933 target gene, herein designated TARGET GENE. ADAM10 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by ADAM10, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ADAM10 BINDING SITE, designated SEQ ID:17173, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54615] A function of GAM7933 is therefore inhibition of A disintegrin and metalloproteinase domain 10 (ADAM10, Accession NP_001101.1), a gene which Member of ADAM family of zinc metalloproteases. Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ADAM10.

[54616] The function of ADAM10 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM47.1.A disintegrin-like and metalloprotease (reprolysin type) with thrombospondin type 1 motif, 13 (ADAMTS13, Accession NP_620597.1) is another GAM7933 target gene, herein designated TARGET GENE. ADAMTS13 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by ADAMTS13, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ADAMTS13 BINDING SITE, designated SEQ ID:11726, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54617] Another function of GAM7933 is therefore inhibition of A disintegrin-like and metalloprotease (reprolysin type) with thrombospondin type 1 motif, 13 (ADAMTS13, Accession NP_620597.1), a gene which cleaves aggrecan, a cartilage proteoglycan, and may be involved in its turnover. Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ADAMTS13.

[54618] The function of ADAMTS13 and its association with various diseases and clinical conditions, has been established

by previous studies, as described hereinabove with reference to GAM71.1.Rho guanine nucleotide exchange factor (gef) 12 (ARHGEF12, Accession NP_056128.1) is another GAM7933 target gene, herein designated TARGET GENE. ARHGEF12 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ARHGEF12, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ARHGEF12 BINDING SITE, designated SEQ ID:19923, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54619] Another function of GAM7933 is therefore inhibition of Rho guanine nucleotide exchange factor (gef) 12 (ARHGEF12, Accession NP_056128.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ARHGEF12.

[54620] Bromodomain containing 2 (BRD2, Accession NP_005095.1) is another GAM7933 target gene, herein designated TARGET GENE. BRD2 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA

encoded by BRD2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BRD2 BINDING SITE, designated SEQ ID:14556, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54621] Another function of GAM7933 is therefore inhibition of Bromodomain containing 2 (BRD2, Accession NP_005095.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BRD2.

[54622] Chromosome 1 open reading frame 21 (C1orf21, Accession NP_110433.1) is another GAM7933 target gene, herein designated TARGET GENE. C1orf21 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C1orf21, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C1orf21 BINDING SITE, designated SEQ ID:12125, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54623] Another function of GAM7933 is therefore inhibition of Chromosome 1 open reading frame 21 (C1orf21, Accession NP_110433.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C1orf21.

[54624] Chemokine (c-c motif) ligand 28 (CCL28, Accession NP_062820.1) is another GAM7933 target gene, herein designated TARGET GENE. CCL28 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CCL28, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CCL28 BINDING SITE, designated SEQ ID:10807, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54625] Another function of GAM7933 is therefore inhibition of Chemokine (c-c motif) ligand 28 (CCL28, Accession NP_062820.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CCL28.

[54626] Centaurin, delta 1 (CENTD1, Accession NP_631921.1) is another GAM7933 target gene, herein designated TARGET

GENE. CENTD1 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by CENTD1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CENTD1 BINDING SITE, designated SEQ ID:9614, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54627] Another function of GAM7933 is therefore inhibition of Centaurin, delta 1 (CENTD1, Accession NP_631921.1), a gene which is involved in cell signaling/communication. Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CENTD1.

[54628] The function of CENTD1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM116.1.Crebbp/ep300 inhibitory protein 1 (CRI1, Accession NP_055150.1) is another GAM7933 target gene, herein designated TARGET GENE. CRI1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CRI1, corresponding to a target binding

site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CRI1 BINDING SITE, designated SEQ ID:16632, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54629] Another function of GAM7933 is therefore inhibition of Crebbp/ep300 inhibitory protein 1 (CRI1, Accession NP_055150.1), a gene which regulates cell cycle as well as tissue- specific transcription and differentiation. Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CRI1.

[54630] The function of CRI1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM229.1.DKFZp547J144 (Accession XP_091486.2) is another GAM7933 target gene, herein designated TARGET GENE. DKFZp547J144 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZp547J144, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the

nucleotide sequences of DKFZp547J144 BINDING SITE, designated SEQ ID:4932, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54631] Another function of GAM7933 is therefore inhibition of DKFZp547J144 (Accession XP_091486.2) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp547J144.

[54632] DKFZP761M1511 (Accession XP_295135.1) is another GAM7933 target gene, herein designated TARGET GENE. DKFZP761M1511 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZP761M1511, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP761M1511 BINDING SITE, designated SEQ ID:16574, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54633] Another function of GAM7933 is therefore inhibition of DKFZP761M1511 (Accession XP_295135.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and

treatment of diseases and clinical conditions associated with DKFZP761M1511.

[54634] DKFZp762K222 (Accession XP_048721.1) is another GAM7933 target gene, herein designated TARGET GENE. DKFZp762K222 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZp762K222, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp762K222 BINDING SITE, designated SEQ ID:17576, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54635] Another function of GAM7933 is therefore inhibition of DKFZp762K222 (Accession XP_048721.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp762K222.

[54636] Cyclin d binding myb-like transcription factor 1 (DMTF1, Accession NP_066968.1) is another GAM7933 target gene, herein designated TARGET GENE. DMTF1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DMTF1, corresponding to a target

binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DMTF1 BINDING SITE, designated SEQ ID:15923, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54637] Another function of GAM7933 is therefore inhibition of Cyclin d binding myb-like transcription factor 1 (DMTF1, Accession NP_066968.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DMTF1.

[54638] Egf-like-domain, multiple 5 (EGFL5, Accession XP_098838.1) is another GAM7933 target gene, herein designated TARGET GENE. EGFL5 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by EGFL5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of EGFL5 BINDING SITE, designated SEQ ID:10302, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54639] Another function of GAM7933 is therefore inhibition of

Egf-like-domain, multiple 5 (EGFL5, Accession XP_098838.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with EGFL5.

[54640] Enamelin (ENAM, Accession NP_114095.1) is another GAM7933 target gene, herein designated TARGET GENE. ENAM BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ENAM, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ENAM BINDING SITE, designated SEQ ID:16108, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54641] Another function of GAM7933 is therefore inhibition of Enamelin (ENAM, Accession NP_114095.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ENAM.

[54642] Erythrocyte membrane protein band 4.1 like 4b (EPB41L4B, Accession NP_060894.1) is another GAM7933 target gene, herein designated TARGET GENE. EPB41L4B BINDING SITE is a target binding site found in the 3' un-

translated region of multiple transcripts of mRNA encoded by EPB41L4B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of EPB41L4B BINDING SITE, designated SEQ ID:4101, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54643] Another function of GAM7933 is therefore inhibition of Erythrocyte membrane protein band 4.1 like 4b (EPB41L4B, Accession NP_060894.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with EPB41L4B.

[54644] Enhancer of zeste homolog 1 (drosophila) (EZH1, Accession NP_001982.2) is another GAM7933 target gene, herein designated TARGET GENE. EZH1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by EZH1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of EZH1 BINDING SITE, designated SEQ ID:4202, to the nucleotide sequence of

GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54645] Another function of GAM7933 is therefore inhibition of Enhancer of zeste homolog 1 (drosophila) (EZH1, Accession NP_001982.2), a gene which may act in transcriptional regulation and heterochromatin maintenance. Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with EZH1.

[54646] The function of EZH1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1. Fatty-acid-coenzyme a ligase, long-chain 4 (FACL4, Accession NP_075266.1) is another GAM7933 target gene, herein designated TARGET GENE. FACL4 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by FACL4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FACL4 BINDING SITE, designated SEQ ID:7615, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ

ID:203.

[54647] Another function of GAM7933 is therefore inhibition of Fatty-acid-coenzyme a ligase, long-chain 4 (FACL4, Accession NP_075266.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FACL4.

[54648] Fatty-acid-coenzyme a ligase, long-chain 4 (FACL4, Accession NP_004449.1) is another GAM7933 target gene, herein designated TARGET GENE. FACL4 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by FACL4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FACL4 BINDING SITE, designated SEQ ID:7615, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54649] Another function of GAM7933 is therefore inhibition of Fatty-acid-coenzyme a ligase, long-chain 4 (FACL4, Accession NP_004449.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FACL4.

[54650] Fibroblast growth factor 2 (basic) (FGF2, Accession

NP_001997.3) is another GAM7933 target gene, herein designated TARGET GENE. FGF2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FGF2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FGF2 BINDING SITE, designated SEQ ID:1793, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54651] Another function of GAM7933 is therefore inhibition of Fibroblast growth factor 2 (basic) (FGF2, Accession NP_001997.3), a gene which the Basic fibroblast growth factor 2; is mitogenic, angiogenic, and neurotrophic factor. Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FGF2.

[54652] The function of FGF2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM36.1.FLJ10520 (Accession NP_060594.2) is another GAM7933 target gene, herein designated TARGET GENE. FLJ10520 BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by FLJ10520, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ10520 BINDING SITE, designated SEQ ID:17571, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54653] Another function of GAM7933 is therefore inhibition of FLJ10520 (Accession NP_060594.2) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ10520.

[54654] FLJ10702 (Accession NP_060654.1) is another GAM7933 target gene, herein designated TARGET GENE. FLJ10702 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ10702, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ10702 BINDING SITE, designated SEQ ID:17057, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54655] Another function of GAM7933 is therefore inhibition of FLJ10702 (Accession NP_060654.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ10702.

[54656] FLJ10874 (Accession NP_060722.1) is another GAM7933 target gene, herein designated TARGET GENE. FLJ10874 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ10874, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ10874 BINDING SITE, designated SEQ ID:5958, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54657] Another function of GAM7933 is therefore inhibition of FLJ10874 (Accession NP_060722.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ10874.

[54658] FLJ10891 (Accession NP_060730.1) is another GAM7933 target gene, herein designated TARGET GENE. FLJ10891 BINDING SITE is a target binding site found in the 3' un-

translated region of mRNA encoded by FLJ10891, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ10891 BINDING SITE, designated SEQ ID:8768, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54659] Another function of GAM7933 is therefore inhibition of FLJ10891 (Accession NP_060730.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ10891.

[54660] FLJ12747 (Accession XP_290972.1) is another GAM7933 target gene, herein designated TARGET GENE. FLJ12747 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ12747, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ12747 BINDING SITE, designated SEQ ID:13605, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54661] Another function of GAM7933 is therefore inhibition of

FLJ12747 (Accession XP_290972.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ12747.

[54662] FLJ12888 (Accession NP_079221.1) is another GAM7933 target gene, herein designated TARGET GENE. FLJ12888 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FLJ12888, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ12888 BINDING SITE, designated SEQ ID:3021, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54663] Another function of GAM7933 is therefore inhibition of FLJ12888 (Accession NP_079221.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ12888.

[54664] FLJ13057 (Accession NP_848526.1) is another GAM7933 target gene, herein designated TARGET GENE. FLJ13057 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ13057, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ13057 BINDING SITE, designated SEQ ID:18278, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54665] Another function of GAM7933 is therefore inhibition of FLJ13057 (Accession NP_848526.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ13057.

[54666] FLJ13204 (Accession NP_079037.2) is another GAM7933 target gene, herein designated TARGET GENE. FLJ13204 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ13204, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ13204 BINDING SITE, designated SEQ ID:2848, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54667] Another function of GAM7933 is therefore inhibition of FLJ13204 (Accession NP_079037.2) . Accordingly, utilities

of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ13204.

[54668] FLJ14675 (Accession NP_116212.3) is another GAM7933 target gene, herein designated TARGET GENE. FLJ14675 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ14675, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ14675 BINDING SITE, designated SEQ ID:14019, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54669] Another function of GAM7933 is therefore inhibition of FLJ14675 (Accession NP_116212.3) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ14675.

[54670] FLJ20274 (Accession NP_060206.1) is another GAM7933 target gene, herein designated TARGET GENE. FLJ20274 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ20274, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20274 BINDING SITE, designated SEQ ID:19345, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54671] Another function of GAM7933 is therefore inhibition of FLJ20274 (Accession NP_060206.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20274.

[54672] FLJ23056 (Accession NP_078858.1) is another GAM7933 target gene, herein designated TARGET GENE. FLJ23056 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ23056, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ23056 BINDING SITE, designated SEQ ID:17879, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54673] Another function of GAM7933 is therefore inhibition of FLJ23056 (Accession NP_078858.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment

of diseases and clinical conditions associated with FLJ23056.

[54674] FLJ31978 (Accession NP_653270.1) is another GAM7933 target gene, herein designated TARGET GENE. FLJ31978 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ31978, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ31978 BINDING SITE, designated SEQ ID:1522, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54675] Another function of GAM7933 is therefore inhibition of FLJ31978 (Accession NP_653270.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ31978.

[54676] FLJ32535 (Accession NP_689760.1) is another GAM7933 target gene, herein designated TARGET GENE. FLJ32535 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FLJ32535, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of FLJ32535 BINDING SITE, designated SEQ ID:8740, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54677] Another function of GAM7933 is therefore inhibition of FLJ32535 (Accession NP_689760.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ32535.

[54678] FLJ32685 (Accession NP_689747.1) is another GAM7933 target gene, herein designated TARGET GENE. FLJ32685 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ32685, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ32685 BINDING SITE, designated SEQ ID:14845, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54679] Another function of GAM7933 is therefore inhibition of FLJ32685 (Accession NP_689747.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

FLJ32685.

[54680] FLJ39370 (Accession NP_689613.1) is another GAM7933 target gene, herein designated TARGET GENE. FLJ39370 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ39370, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ39370 BINDING SITE, designated SEQ ID:8161, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54681] Another function of GAM7933 is therefore inhibition of FLJ39370 (Accession NP_689613.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ39370.

[54682] Gamma-aminobutyric acid (gaba) a receptor, pi (GABRP, Accession NP_055026.1) is another GAM7933 target gene, herein designated TARGET GENE. GABRP BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GABRP, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementar-

ity of the nucleotide sequences of GABRP BINDING SITE, designated SEQ ID:9698, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54683] Another function of GAM7933 is therefore inhibition of Gamma-aminobutyric acid (gaba) a receptor, pi (GABRP, Accession NP_055026.1), a gene which mediates neuronal inhibition by binding to the gaba/benzodiazepine receptor and opening an integral chloride channel. Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GABRP.

[54684] The function of GABRP and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM295.1. Gdp dissociation inhibitor 2 (GDI2, Accession NP_001485.2) is another GAM7933 target gene, herein designated TARGET GENE. GDI2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GDI2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GDI2 BINDING SITE,

designated SEQ ID:3115, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54685] Another function of GAM7933 is therefore inhibition of Gdp dissociation inhibitor 2 (GDI2, Accession NP_001485.2), a gene which regulates the gdp/gtp exchange reaction of most rab proteins by inhibiting the dissociation of gdp from them, and the subsequent binding of gtp to them. Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GDI2.

[54686] The function of GDI2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM139.1.GPIG4 (Accession NP_689758.1) is another GAM7933 target gene, herein designated TARGET GENE. GPIG4 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GPIG4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GPIG4 BINDING SITE, designated SEQ ID:1050, to the nucleotide sequence of GAM7933 RNA, herein designated

GAM RNA, also designated SEQ ID:203.

[54687] Another function of GAM7933 is therefore inhibition of GPIG4 (Accession NP_689758.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GPIG4.

[54688] Potassium large conductance calcium-activated channel, subfamily m, beta member 4 (KCNMB4, Accession NP_055320.4) is another GAM7933 target gene, herein designated TARGET GENE. KCNMB4 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KCNMB4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KCNMB4 BINDING SITE, designated SEQ ID:7510, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54689] Another function of GAM7933 is therefore inhibition of Potassium large conductance calcium-activated channel, subfamily m, beta member 4 (KCNMB4, Accession NP_055320.4), a gene which regulates gating kinetics of slow K channels in a Ca- sensitive manner. Accordingly, utilities of GAM7933 include diagnosis, prevention and

treatment of diseases and clinical conditions associated with KCNMB4.

[54690] The function of KCNMB4 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM144.1.KIAA0179 (Accession XP_035973.4) is another GAM7933 target gene, herein designated TARGET GENE. KIAA0179 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0179, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0179 BINDING SITE, designated SEQ ID:4948, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54691] Another function of GAM7933 is therefore inhibition of KIAA0179 (Accession XP_035973.4) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0179.

[54692] KIAA0218 (Accession NP_055575.1) is another GAM7933 target gene, herein designated TARGET GENE. KIAA0218

BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0218, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0218 BINDING SITE, designated SEQ ID:8133, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54693] Another function of GAM7933 is therefore inhibition of KIAA0218 (Accession NP_055575.1). Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0218.

[54694] KIAA0247 (Accession NP_055549.1) is another GAM7933 target gene, herein designated TARGET GENE. KIAA0247 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0247, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0247 BINDING SITE, designated SEQ ID:13278, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54695] Another function of GAM7933 is therefore inhibition of KIAA0247 (Accession NP_055549.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0247.

[54696] KIAA0645 (Accession NP_055477.1) is another GAM7933 target gene, herein designated TARGET GENE. KIAA0645 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0645, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0645 BINDING SITE, designated SEQ ID:3596, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54697] Another function of GAM7933 is therefore inhibition of KIAA0645 (Accession NP_055477.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0645.

[54698] KIAA1164 (Accession XP_045358.2) is another GAM7933 target gene, herein designated TARGET GENE. KIAA1164 BINDING SITE is a target binding site found in the 3' un-

translated region of mRNA encoded by KIAA1164, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1164 BINDING SITE, designated SEQ ID:1382, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54699] Another function of GAM7933 is therefore inhibition of KIAA1164 (Accession XP_045358.2) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1164.

[54700] KIAA1305 (Accession NP_079357.1) is another GAM7933 target gene, herein designated TARGET GENE. KIAA1305 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1305, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1305 BINDING SITE, designated SEQ ID:19660, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54701] Another function of GAM7933 is therefore inhibition of

KIAA1305 (Accession NP_079357.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1305.

[54702] KIAA1726 (Accession XP_040860.3) is another GAM7933 target gene, herein designated TARGET GENE. KIAA1726 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1726, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1726 BINDING SITE, designated SEQ ID:13195, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54703] Another function of GAM7933 is therefore inhibition of KIAA1726 (Accession XP_040860.3) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1726.

[54704] Kinesin-associated protein 3 (KIFAP3, Accession NP_055785.2) is another GAM7933 target gene, herein designated TARGET GENE. KIFAP3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA

encoded by KIFAP3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIFAP3 BINDING SITE, designated SEQ ID:5824, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54705] Another function of GAM7933 is therefore inhibition of Kinesin-associated protein 3 (KIFAP3, Accession NP_055785.2) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIFAP3.

[54706] LOC113612 (Accession XP_054492.1) is another GAM7933 target gene, herein designated TARGET GENE. LOC113612 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC113612, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC113612 BINDING SITE, designated SEQ ID:6871, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54707] Another function of GAM7933 is therefore inhibition of LOC113612 (Accession XP_054492.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC113612.

[54708] LOC145652 (Accession XP_096827.1) is another GAM7933 target gene, herein designated TARGET GENE. LOC145652 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC145652, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC145652 BINDING SITE, designated SEQ ID:12056, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54709] Another function of GAM7933 is therefore inhibition of LOC145652 (Accession XP_096827.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC145652.

[54710] LOC153222 (Accession NP_705835.1) is another GAM7933 target gene, herein designated TARGET GENE.

LOC153222 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC153222, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC153222 BINDING SITE, designated SEQ ID:7489, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54711] Another function of GAM7933 is therefore inhibition of LOC153222 (Accession NP_705835.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC153222.

[54712] LOC153883 (Accession XP_087798.1) is another GAM7933 target gene, herein designated TARGET GENE. LOC153883 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC153883, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC153883 BINDING SITE, designated SEQ ID:18705, to the nucleotide sequence of

GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54713] Another function of GAM7933 is therefore inhibition of LOC153883 (Accession XP_087798.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC153883.

[54714] LOC220926 (Accession XP_166128.1) is another GAM7933 target gene, herein designated TARGET GENE. LOC220926 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC220926, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC220926 BINDING SITE, designated SEQ ID:11165, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54715] Another function of GAM7933 is therefore inhibition of LOC220926 (Accession XP_166128.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC220926.

[54716] LOC221035 (Accession XP_167640.1) is another GAM7933 target gene, herein designated TARGET GENE. LOC221035 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC221035, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC221035 BINDING SITE, designated SEQ ID:17864, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54717] Another function of GAM7933 is therefore inhibition of LOC221035 (Accession XP_167640.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC221035.

[54718] LOC222674 (Accession XP_167095.3) is another GAM7933 target gene, herein designated TARGET GENE. LOC222674 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC222674, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC222674 BINDING SITE, designated SEQ ID:4311, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54719] Another function of GAM7933 is therefore inhibition of LOC222674 (Accession XP_167095.3) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC222674.

[54720] LOC255328 (Accession XP_172920.1) is another GAM7933 target gene, herein designated TARGET GENE. LOC255328 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC255328, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC255328 BINDING SITE, designated SEQ ID:10238, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54721] Another function of GAM7933 is therefore inhibition of LOC255328 (Accession XP_172920.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC255328.

[54722] LOC256598 (Accession XP_172816.1) is another GAM7933 target gene, herein designated TARGET GENE. LOC256598 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC256598, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC256598 BINDING SITE, designated SEQ ID:8974, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54723] Another function of GAM7933 is therefore inhibition of LOC256598 (Accession XP_172816.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC256598.

[54724] LOC257122 (Accession XP_171239.1) is another GAM7933 target gene, herein designated TARGET GENE. LOC257122 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC257122, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC257122 BINDING SITE, designated SEQ ID:12899, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54725] Another function of GAM7933 is therefore inhibition of LOC257122 (Accession XP_171239.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC257122.

[54726] LOC257408 (Accession XP_171176.1) is another GAM7933 target gene, herein designated TARGET GENE. LOC257408 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC257408, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC257408 BINDING SITE, designated SEQ ID:12573, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54727] Another function of GAM7933 is therefore inhibition of

LOC257408 (Accession XP_171176.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC257408.

[54728] LOC282959 (Accession XP_212622.1) is another GAM7933 target gene, herein designated TARGET GENE. LOC282959 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC282959, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC282959 BINDING SITE, designated SEQ ID:4311, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54729] Another function of GAM7933 is therefore inhibition of LOC282959 (Accession XP_212622.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC282959.

[54730] LOC283213 (Accession XP_208566.1) is another GAM7933 target gene, herein designated TARGET GENE. LOC283213 BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by LOC283213, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283213 BINDING SITE, designated SEQ ID:13264, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54731] Another function of GAM7933 is therefore inhibition of LOC283213 (Accession XP_208566.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283213.

[54732] LOC283423 (Accession XP_211031.1) is another GAM7933 target gene, herein designated TARGET GENE. LOC283423 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283423, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283423 BINDING SITE, designated SEQ ID:492, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also design-

nated SEQ ID:203.

[54733] Another function of GAM7933 is therefore inhibition of LOC283423 (Accession XP_211031.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283423.

[54734] LOC283715 (Accession XP_208800.1) is another GAM7933 target gene, herein designated TARGET GENE. LOC283715 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC283715, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283715 BINDING SITE, designated SEQ ID:4062, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54735] Another function of GAM7933 is therefore inhibition of LOC283715 (Accession XP_208800.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283715.

[54736] LOC283731 (Accession XP_211184.1) is another

GAM7933 target gene, herein designated TARGET GENE. LOC283731 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283731, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283731 BINDING SITE, designated SEQ ID:16313, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54737] Another function of GAM7933 is therefore inhibition of LOC283731 (Accession XP_211184.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283731.

[54738] LOC283820 (Accession NP_775885.1) is another GAM7933 target gene, herein designated TARGET GENE. LOC283820 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283820, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283820 BINDING SITE, design-

nated SEQ ID:6496, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54739] Another function of GAM7933 is therefore inhibition of LOC283820 (Accession NP_775885.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283820.

[54740] LOC284647 (Accession XP_211569.1) is another GAM7933 target gene, herein designated TARGET GENE. LOC284647 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284647, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284647 BINDING SITE, designated SEQ ID:15385, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54741] Another function of GAM7933 is therefore inhibition of LOC284647 (Accession XP_211569.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC284647.

[54742] LOC285283 (Accession XP_208017.1) is another GAM7933 target gene, herein designated TARGET GENE. LOC285283 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285283, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285283 BINDING SITE, designated SEQ ID:8711, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54743] Another function of GAM7933 is therefore inhibition of LOC285283 (Accession XP_208017.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285283.

[54744] LOC285334 (Accession XP_211844.1) is another GAM7933 target gene, herein designated TARGET GENE. LOC285334 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285334, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285334 BINDING SITE, designated SEQ ID:19928, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54745] Another function of GAM7933 is therefore inhibition of LOC285334 (Accession XP_211844.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285334.

[54746] LOC285769 (Accession XP_209755.1) is another GAM7933 target gene, herein designated TARGET GENE. LOC285769 BINDING SITE1 and LOC285769 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC285769, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285769 BINDING SITE1 and LOC285769 BINDING SITE2, designated SEQ ID:4221 and SEQ ID:8378 respectively, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54747] Another function of GAM7933 is therefore inhibition of

LOC285769 (Accession XP_209755.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285769.

[54748] LOC285797 (Accession XP_212026.1) is another GAM7933 target gene, herein designated TARGET GENE. LOC285797 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285797, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285797 BINDING SITE, designated SEQ ID:4100, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54749] Another function of GAM7933 is therefore inhibition of LOC285797 (Accession XP_212026.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285797.

[54750] LOC285798 (Accession XP_212024.1) is another GAM7933 target gene, herein designated TARGET GENE. LOC285798 BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by LOC285798, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285798 BINDING SITE, designated SEQ ID:2760, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54751] Another function of GAM7933 is therefore inhibition of LOC285798 (Accession XP_212024.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285798.

[54752] LOC338981 (Accession XP_294767.2) is another GAM7933 target gene, herein designated TARGET GENE. LOC338981 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC338981, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338981 BINDING SITE, designated SEQ ID:610, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also design-

nated SEQ ID:203.

[54753] Another function of GAM7933 is therefore inhibition of LOC338981 (Accession XP_294767.2) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC338981.

[54754] LOC340286 (Accession XP_295200.1) is another GAM7933 target gene, herein designated TARGET GENE. LOC340286 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC340286, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340286 BINDING SITE, designated SEQ ID:17638, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54755] Another function of GAM7933 is therefore inhibition of LOC340286 (Accession XP_295200.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340286.

[54756] LOC348127 (Accession XP_302662.1) is another

GAM7933 target gene, herein designated TARGET GENE. LOC348127 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC348127, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348127 BINDING SITE, designated SEQ ID:610, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54757] Another function of GAM7933 is therefore inhibition of LOC348127 (Accession XP_302662.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348127.

[54758] LOC348130 (Accession XP_302666.1) is another GAM7933 target gene, herein designated TARGET GENE. LOC348130 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC348130, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348130 BINDING SITE, design-

nated SEQ ID:610, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54759] Another function of GAM7933 is therefore inhibition of LOC348130 (Accession XP_302666.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348130.

[54760] LOC348817 (Accession XP_302901.1) is another GAM7933 target gene, herein designated TARGET GENE. LOC348817 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC348817, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348817 BINDING SITE, designated SEQ ID:7451, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54761] Another function of GAM7933 is therefore inhibition of LOC348817 (Accession XP_302901.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC348817.

[54762] LOC349081 (Accession XP_300935.1) is another GAM7933 target gene, herein designated TARGET GENE. LOC349081 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC349081, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349081 BINDING SITE, designated SEQ ID:4500, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54763] Another function of GAM7933 is therefore inhibition of LOC349081 (Accession XP_300935.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349081.

[54764] LOC349161 (Accession XP_302970.1) is another GAM7933 target gene, herein designated TARGET GENE. LOC349161 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC349161, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349161 BINDING SITE, designated SEQ ID:13194, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54765] Another function of GAM7933 is therefore inhibition of LOC349161 (Accession XP_302970.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349161.

[54766] Leucine-rich repeat protein, neuronal 3 (LRRN3, Accession NP_060804.2) is another GAM7933 target gene, herein designated TARGET GENE. LRRN3 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LRRN3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LRRN3 BINDING SITE, designated SEQ ID:11739, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54767] Another function of GAM7933 is therefore inhibition of Leucine-rich repeat protein, neuronal 3 (LRRN3, Accession

NP_060804.2) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LRRN3.

[54768] Leucine zipper, putative tumor suppressor 1 (LZTS1, Accession NP_066300.1) is another GAM7933 target gene, herein designated TARGET GENE. LZTS1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LZTS1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LZTS1 BINDING SITE, designated SEQ ID:5068, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54769] Another function of GAM7933 is therefore inhibition of Leucine zipper, putative tumor suppressor 1 (LZTS1, Accession NP_066300.1), a gene which is an essential component of the nucleoskeleton. potential role in crosslinking filaments or anchoring other molecules. it is essential for growth. Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LZTS1.

[54770] The function of LZTS1 and its association with various

diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM130.1. Mad, mothers against decapentaplegic homolog 7 (drosophila) (MADH7, Accession NP_005895.1) is another GAM7933 target gene, herein designated TARGET GENE. MADH7 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MADH7, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MADH7 BINDING SITE, designated SEQ ID:2946, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54771] Another function of GAM7933 is therefore inhibition of Mad, mothers against decapentaplegic homolog 7 (drosophila) (MADH7, Accession NP_005895.1), a gene which may affect transcription in response to TGF- β superfamily signaling pathways, inhibits BMP/Smad1 (MADH1) signaling and therefore may be associated with Scleroderma. Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of Scleroderma, and of other diseases and clinical conditions associated with

MADH7.

[54772] The function of MADH7 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM354.1.MAGEG1 (Accession NP_619649.1) is another GAM7933 target gene, herein designated TARGET GENE. MAGEG1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MAGEG1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MAGEG1 BINDING SITE, designated SEQ ID:10063, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54773] Another function of GAM7933 is therefore inhibition of MAGEG1 (Accession NP_619649.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MAGEG1.

[54774] MGC16733 (Accession NP_291025.1) is another GAM7933 target gene, herein designated TARGET GENE. MGC16733 BINDING SITE is a target binding site found in the 3' un-

translated region of mRNA encoded by MGC16733, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC16733 BINDING SITE, designated SEQ ID:13414, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54775] Another function of GAM7933 is therefore inhibition of MGC16733 (Accession NP_291025.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC16733.

[54776] MGC29891 (Accession NP_653219.1) is another GAM7933 target gene, herein designated TARGET GENE. MGC29891 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC29891, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC29891 BINDING SITE, designated SEQ ID:9508, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54777] Another function of GAM7933 is therefore inhibition of

MGC29891 (Accession NP_653219.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC29891.

[54778] MGC5576 (Accession NP_076961.1) is another GAM7933 target gene, herein designated TARGET GENE. MGC5576 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC5576, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC5576 BINDING SITE, designated SEQ ID:7009, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54779] Another function of GAM7933 is therefore inhibition of MGC5576 (Accession NP_076961.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC5576.

[54780] Matrix metalloproteinase 16 (membrane-inserted) (MMP16, Accession NP_005932.2) is another GAM7933 target gene, herein designated TARGET GENE. MMP16 BINDING SITE is a target binding site found in the 3' un-

translated region of multiple transcripts of mRNA encoded by MMP16, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MMP16 BINDING SITE, designated SEQ ID:5291, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54781] Another function of GAM7933 is therefore inhibition of Matrix metalloproteinase 16 (membrane-inserted) (MMP16, Accession NP_005932.2) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MMP16.

[54782] Nk3 transcription factor related, locus 1 (drosophila) (NKX3-1, Accession NP_006158.2) is another GAM7933 target gene, herein designated TARGET GENE. NKX3-1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by NKX3-1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NKX3-1 BINDING SITE, designated SEQ ID:15691, to the

nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54783] Another function of GAM7933 is therefore inhibition of Nk3 transcription factor related, locus 1 (drosophila) (NKX3-1, Accession NP_006158.2) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NKX3-1.

[54784] Nucleoporin 153kda (NUP153, Accession NP_005115.2) is another GAM7933 target gene, herein designated TARGET GENE. NUP153 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by NUP153, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NUP153 BINDING SITE, designated SEQ ID:18750, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54785] Another function of GAM7933 is therefore inhibition of Nucleoporin 153kda (NUP153, Accession NP_005115.2) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions

associated with NUP153.

[54786] Pleiomorphic adenoma gene 1 (PLAG1, Accession NP_002646.1) is another GAM7933 target gene, herein designated TARGET GENE. PLAG1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PLAG1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PLAG1 BINDING SITE, designated SEQ ID:8200, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54787] Another function of GAM7933 is therefore inhibition of Pleiomorphic adenoma gene 1 (PLAG1, Accession NP_002646.1), a gene which contains a zinc finger domain. Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PLAG1.

[54788] The function of PLAG1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM47.1. Plastin 1 (i isoform) (PLS1, Accession NP_002661.1) is another GAM7933 target gene, herein

designated TARGET GENE. PLS1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PLS1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PLS1 BINDING SITE, designated SEQ ID:14544, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54789] Another function of GAM7933 is therefore inhibition of Plastin 1 (i isoform) (PLS1, Accession NP_002661.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PLS1.

[54790] PM5 (Accession NP_055102.2) is another GAM7933 target gene, herein designated TARGET GENE. PM5 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PM5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PM5 BINDING SITE, designated SEQ ID:6496, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also des-

ignated SEQ ID:203.

[54791] Another function of GAM7933 is therefore inhibition of PM5 (Accession NP_055102.2) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PM5.

[54792] PP35 (Accession NP_853559.1) is another GAM7933 target gene, herein designated TARGET GENE. PP35 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PP35, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PP35 BINDING SITE, designated SEQ ID:15536, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54793] Another function of GAM7933 is therefore inhibition of PP35 (Accession NP_853559.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PP35.

[54794] PP35 (Accession NP_008947.1) is another GAM7933 target gene, herein designated TARGET GENE. PP35 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PP35,

corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PP35 BINDING SITE, designated SEQ ID:15536, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54795] Another function of GAM7933 is therefore inhibition of PP35 (Accession NP_008947.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PP35.

[54796] Protein phosphatase 1d magnesium-dependent, delta isoform (PPM1D, Accession NP_003611.1) is another GAM7933 target gene, herein designated TARGET GENE. PPM1D BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PPM1D, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PPM1D BINDING SITE, designated SEQ ID:10407, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54797] Another function of GAM7933 is therefore inhibition of Protein phosphatase 1d magnesium-dependent, delta iso-

form (PPM1D, Accession NP_003611.1), a gene which might contribute to growth inhibitory pathways activated in response to dna damage in a manner. and therefore may be associated with Breast cancer. Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of Breast cancer, and of other diseases and clinical conditions associated with PPM1D.

[54798] The function of PPM1D and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM2337.1. Protein phosphatase 1, regulatory (inhibitor) subunit 3a (glycogen and sarcoplasmic reticulum binding subunit, skeletal muscle) (PPP1R3A, Accession NP_002702.1) is another GAM7933 target gene, herein designated TARGET GENE. PPP1R3A BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PPP1R3A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PPP1R3A BINDING SITE, designated SEQ ID:500, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54799] Another function of GAM7933 is therefore inhibition of Protein phosphatase 1, regulatory (inhibitor) subunit 3a (glycogen and sarcoplasmic reticulum binding subunit, skeletal muscle) (PPP1R3A, Accession NP_002702.1), a gene which regulates phosphatase activity towards glycogen synthase, active in skeletal muscle and therefore may be associated with Insulin resistance and glycemia variation. Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of Insulin resistance and glycemia variation, and of other diseases and clinical conditions associated with PPP1R3A.

[54800] The function of PPP1R3A and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM44.1. Palmitoyl-protein thioesterase 2 (PPT2, Accession NP_620312.1) is another GAM7933 target gene, herein designated TARGET GENE. PPT2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PPT2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PPT2 BINDING SITE, designated SEQ ID:7654, to the nu-

cleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54801] Another function of GAM7933 is therefore inhibition of Palmitoyl-protein thioesterase 2 (PPT2, Accession NP_620312.1), a gene which is a palmitoyl- protein thioesterase 2 which possesses a different substrate specificity than PPT1. Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PPT2.

[54802] The function of PPT2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM63.1.PRO0327 (Accession NP_054844.1) is another GAM7933 target gene, herein designated TARGET GENE. PRO0327 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PRO0327, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PRO0327 BINDING SITE, designated SEQ ID:8711, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54803] Another function of GAM7933 is therefore inhibition of PRO0327 (Accession NP_054844.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PRO0327.

[54804] Proteasome (prosome, macropain) 26s subunit, non-atpase, 7 (mov34 homolog) (PSMD7, Accession NP_002802.2) is another GAM7933 target gene, herein designated TARGET GENE. PSMD7 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PSMD7, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PSMD7 BINDING SITE, designated SEQ ID:11380, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54805] Another function of GAM7933 is therefore inhibition of Proteasome (prosome, macropain) 26s subunit, non-atpase, 7 (mov34 homolog) (PSMD7, Accession NP_002802.2) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PSMD7.

[54806] Rab3b, member ras oncogene family (RAB3B, Accession NP_002858.2) is another GAM7933 target gene, herein designated TARGET GENE. RAB3B BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RAB3B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RAB3B BINDING SITE, designated SEQ ID:17468, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54807] Another function of GAM7933 is therefore inhibition of Rab3b, member ras oncogene family (RAB3B, Accession NP_002858.2) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RAB3B.

[54808] Reversion-inducing-cysteine-rich protein with kazal motifs (RECK, Accession NP_066934.1) is another GAM7933 target gene, herein designated TARGET GENE. RECK BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RECK, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the com-

plementarity of the nucleotide sequences of RECK BINDING SITE, designated SEQ ID:11196, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54809] Another function of GAM7933 is therefore inhibition of Reversion-inducing-cysteine-rich protein with kazal motifs (RECK, Accession NP_066934.1), a gene which plays a role in regulation of cancer progression and tumor angiogenesis. and therefore may be associated with Cancerous tumors. Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of Cancerous tumors, and of other diseases and clinical conditions associated with RECK.

[54810] The function of RECK and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM377.1.Regulatory factor x, 3 (influences hla class ii expression) (RFX3, Accession NP_002910.1) is another GAM7933 target gene, herein designated TARGET GENE. RFX3 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by RFX3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III

of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RFX3 BINDING SITE, designated SEQ ID:19639, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54811] Another function of GAM7933 is therefore inhibition of Regulatory factor x, 3 (influences hla class ii expression) (RFX3, Accession NP_002910.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RFX3.

[54812] RNAC (Accession NP_005763.2) is another GAM7933 target gene, herein designated TARGET GENE. RNAC BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RNAC, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RNAC BINDING SITE, designated SEQ ID:12142, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54813] Another function of GAM7933 is therefore inhibition of RNAC (Accession NP_005763.2) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of

diseases and clinical conditions associated with RNAC.

[54814] Spinocerebellar ataxia 1 (olivopontocerebellar ataxia 1, autosomal dominant, ataxin 1) (SCA1, Accession NP_000323.1) is another GAM7933 target gene, herein designated TARGET GENE. SCA1 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by SCA1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SCA1 BINDING SITE, designated SEQ ID:8968, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54815] Another function of GAM7933 is therefore inhibition of Spinocerebellar ataxia 1 (olivopontocerebellar ataxia 1, autosomal dominant, ataxin 1) (SCA1, Accession NP_000323.1). Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SCA1.

[54816] SE20-4 (Accession NP_071400.1) is another GAM7933 target gene, herein designated TARGET GENE. SE20-4 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SE20-4, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SE20-4 BINDING SITE, designated SEQ ID:3595, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54817] Another function of GAM7933 is therefore inhibition of SE20-4 (Accession NP_071400.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SE20-4.

[54818] Sh3-domain binding protein 2 (SH3BP2, Accession NP_003014.2) is another GAM7933 target gene, herein designated TARGET GENE. SH3BP2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SH3BP2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SH3BP2 BINDING SITE, designated SEQ ID:13854, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54819] Another function of GAM7933 is therefore inhibition of Sh3-domain binding protein 2 (SH3BP2, Accession

NP_003014.2) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SH3BP2.

[54820] Seven in absentia homolog 1 (drosophila) (SIAH1, Accession NP_003022.1) is another GAM7933 target gene, herein designated TARGET GENE. SIAH1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SIAH1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SIAH1 BINDING SITE, designated SEQ ID:11362, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54821] Another function of GAM7933 is therefore inhibition of Seven in absentia homolog 1 (drosophila) (SIAH1, Accession NP_003022.1), a gene which mediates a beta-catenin degradation pathway linking p53 activation to cell cycle control. Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SIAH1.

[54822] The function of SIAH1 and its association with various diseases and clinical conditions, has been established by

previous studies, as described hereinabove with reference to GAM100.1.Sialic acid binding ig-like lectin 8 (SIGLEC8, Accession NP_055257.1) is another GAM7933 target gene, herein designated TARGET GENE. SIGLEC8 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by SIGLEC8, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SIGLEC8 BINDING SITE, designated SEQ ID:18948, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54823] Another function of GAM7933 is therefore inhibition of Sialic acid binding ig-like lectin 8 (SIGLEC8, Accession NP_055257.1), a gene which is a cell adhesion molecule for postnatal neural development. Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SIGLEC8.

[54824] The function of SIGLEC8 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM63.1.SKIP (Accession XP_051221.2) is another GAM7933 target gene, herein designated TARGET GENE.

SKIP BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by SKIP, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SKIP BINDING SITE, designated SEQ ID:13806, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54825] Another function of GAM7933 is therefore inhibition of SKIP (Accession XP_051221.2) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SKIP.

[54826] Son dna binding protein (SON, Accession NP_115571.1) is another GAM7933 target gene, herein designated TARGET GENE. SON BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by SON, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SON BINDING SITE, designated SEQ ID:7402, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54827] Another function of GAM7933 is therefore inhibition of Son dna binding protein (SON, Accession NP_115571.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SON.

[54828] Spastic paraplegia 7, paraplegin (pure and complicated autosomal recessive) (SPG7, Accession NP_003110.1) is another GAM7933 target gene, herein designated TARGET GENE. SPG7 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by SPG7, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SPG7 BINDING SITE, designated SEQ ID:5110, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54829] Another function of GAM7933 is therefore inhibition of Spastic paraplegia 7, paraplegin (pure and complicated autosomal recessive) (SPG7, Accession NP_003110.1), a gene which act as an atp- dependent zinc metalloprotease. involved in the degradation of sigma- 32. Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associ-

ated with SPG7.

[54830] The function of SPG7 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM1668.1. Syntaxin binding protein 1 (STXBP1, Accession NP_003156.1) is another GAM7933 target gene, herein designated TARGET GENE. STXBP1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by STXBP1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of STXBP1 BINDING SITE, designated SEQ ID:11449, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54831] Another function of GAM7933 is therefore inhibition of Syntaxin binding protein 1 (STXBP1, Accession NP_003156.1), a gene which may play a role in determining the specificity of intracellular fusion reactions. Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with STXBP1.

[54832] The function of STXBP1 and its association with various

diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM207.2. Transcription factor ap-2 alpha (activating enhancer binding protein 2 alpha) (TFAP2A, Accession NP_003211.1) is another GAM7933 target gene, herein designated TARGET GENE. TFAP2A BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TFAP2A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TFAP2A BINDING SITE, designated SEQ ID:8195, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54833] Another function of GAM7933 is therefore inhibition of Transcription factor ap-2 alpha (activating enhancer binding protein 2 alpha) (TFAP2A, Accession NP_003211.1), a gene which may be involved in anterior eye chamber development. Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TFAP2A.

[54834] The function of TFAP2A and its association with various diseases and clinical conditions, has been established by

previous studies, as described hereinabove with reference to GAM967.1.UNC5H2 (Accession NP_734465.1) is another GAM7933 target gene, herein designated TARGET GENE. UNC5H2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by UNC5H2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of UNC5H2 BINDING SITE, designated SEQ ID:13226, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54835] Another function of GAM7933 is therefore inhibition of UNC5H2 (Accession NP_734465.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with UNC5H2.

[54836] Wd repeat domain 5b (WDR5B, Accession NP_061942.2) is another GAM7933 target gene, herein designated TARGET GENE. WDR5B BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by WDR5B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of WDR5B BINDING SITE, designated SEQ ID:20162, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54837] Another function of GAM7933 is therefore inhibition of Wd repeat domain 5b (WDR5B, Accession NP_061942.2) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with WDR5B.

[54838] Wolf-hirschhorn syndrome candidate 1 (WHSC1, Accession NP_579889.1) is another GAM7933 target gene, herein designated TARGET GENE. WHSC1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by WHSC1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of WHSC1 BINDING SITE, designated SEQ ID:12260, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54839] Another function of GAM7933 is therefore inhibition of Wolf-hirschhorn syndrome candidate 1 (WHSC1, Acces-

sion NP_579889.1), a gene which binds covalently to and repairs g/t mismatches. and therefore may be associated with Wolf- hirschhorn syndrome. Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of Wolf- hirschhorn syndrome, and of other diseases and clinical conditions associated with WHSC1.

[54840] The function of WHSC1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1.ZFYVE1 (Accession NP_067083.1) is another GAM7933 target gene, herein designated TARGET GENE. ZFYVE1 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by ZFYVE1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZFYVE1 BINDING SITE, designated SEQ ID:16631, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54841] Another function of GAM7933 is therefore inhibition of ZFYVE1 (Accession NP_067083.1) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of

diseases and clinical conditions associated with ZFYVE1.

[54842] ZFYVE1 (Accession XP_027302.5) is another GAM7933 target gene, herein designated TARGET GENE. ZFYVE1 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by ZFYVE1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZFYVE1 BINDING SITE, designated SEQ ID:16631, to the nucleotide sequence of GAM7933 RNA, herein designated GAM RNA, also designated SEQ ID:203.

[54843] Another function of GAM7933 is therefore inhibition of ZFYVE1 (Accession XP_027302.5) . Accordingly, utilities of GAM7933 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZFYVE1.

[54844]

[54845] Fig. 8 further provides a conceptual description of a novel bioinformatically detected of the present invention, referred to here as Genomic Address Messenger 7957 (GAM7957), which modulates expression of respective target genes thereof, the function and utility of which target genes is known in the art.

[54846] GAM7957 is a novel bioinformatically detected regulatory, non protein coding, micro RNA (miRNA) gene. The method by which GAM7957 was detected is described hereinabove with reference to Figs. 8-15.

[54847] GAM7957 gene, herein designated GAM GENE, and GAM7957 target gene, herein designated TARGET GENE, are human genes contained in the human genome.

[54848] GAM7957 gene encodes a GAM7957 precursor RNA, herein designated GAM PRECURSOR RNA. Similar to other miRNA genes, and unlike most ordinary genes, GAM7957 precursor RNA does not encode a protein. A nucleotide sequence identical or highly similar to the nucleotide sequence of GAM7957 precursor RNA is designated SEQ ID:42, and is provided hereinbelow with reference to the sequence listing part.

[54849] GAM7957 precursor RNA folds onto itself, forming GAM7957 folded precursor RNA, herein designated GAM FOLDED PRECURSOR RNA, which has a two-dimensional `hairpin structure`. As is well known in the art, this `hairpin structure`, is typical of RNA encoded by miRNA genes, and is due to the fact that the nucleotide sequence of the first half of the RNA encoded by a miRNA gene is an accurate or partial inversed-reversed sequence of the nu-

cleotide sequence of the second half thereof.

[54850] GAM7957 precursor RNA folds onto itself, forming GAM7957 folded precursor RNA, herein designated GAM FOLDED PRECURSOR RNA, which has a two-dimensional `hairpin structure`. As is well known in the art, this `hairpin structure`, is typical of RNA encoded by miRNA genes, and is due to the fact that the nucleotide sequence of the first half of the RNA encoded by a miRNA gene is an accurate or partial reverse-complementary sequence of the nucleotide sequence of the second half thereof.

[54851] Nucleotide sequence of GAM7957 precursor RNA, designated SEQ-ID: 42, and a schematic representation of a predicted secondary folding of GAM7957 folded precursor RNA are further described with reference to Table 2, hereby incorporated by reference.

[54852] An enzyme complex designated DICER COMPLEX, `dices` the GAM7957 folded precursor RNA into GAM7957 RNA, herein designated GAM RNA, a single stranded ~22 nt long RNA segment. As is known in the art, `dicing` of a hairpin structured RNA precursor product into a short ~22nt RNA segment is catalyzed by an enzyme complex comprising an enzyme called Dicer together with other necessary proteins. A probable (GAM Prediction Accuracy

Group: C) nucleotide sequence of GAM7957 RNA is designated SEQ ID:297, and is provided hereinbelow with references to the sequence listing part and Table 3, hereby incorporated by reference.

[54853] GAM7957 target gene, herein designated TARGET GENE, encodes a corresponding messenger RNA, GAM7957 target RNA, herein designated GAM TARGET RNA. GAM7957 target RNA comprises three regions, as is typical of mRNA of a protein coding gene: a 5' untranslated region, a protein coding region and a 3' untranslated region, designated 5' UTR, PROTEIN CODING and 3' UTR respectively.

[54854] GAM7957 RNA, herein designated GAM RNA, binds complementarily to one or more target binding sites located in untranslated regions of GAM7957 target RNA, herein designated GAM TARGET RNA. This complementary binding is due to the fact that the nucleotide sequence of GAM7957 RNA is an accurate or a partial inversed-reversed sequence of the nucleotide sequence of each of the target binding sites. As an illustration, Fig. 8 shows three such target binding sites, designated BINDING SITE I, BINDING SITE II and BINDING SITE III respectively. It is appreciated that the number of target binding sites shown in Fig. 8 is meant as an illustration only, and is not meant to be limit-

ing GAM7957 RNA may have a different number of target binding sites in untranslated regions of a GAM7957 target RNA. It is further appreciated that while Fig. 8 depicts target binding sites in the 3'UTR region, this is meant as an example only these target binding sites may be located in the 3'UTR region, the 5'UTR region, or in both 3'UTR and 5'UTR regions.

[54855] The complementary binding of GAM7957 RNA, herein designated GAM RNA, to target binding sites on GAM7957 target RNA, herein designated GAM TARGET RNA, such as BINDING SITE I, BINDING SITE II and BINDING SITE III, inhibits translation of GAM7957 target RNA into GAM7957 target protein, herein designated GAM TARGET PROTEIN. GAM target protein is therefore outlined by a broken line.

[54856] It is appreciated that GAM7957 target gene, herein designated TARGET GENE, in fact represents a plurality of GAM7957 target genes. The mRNA of each one of this plurality of GAM7957 target genes comprises one or more target binding sites, each having a nucleotide sequence which is at least partly complementary to GAM7957 RNA, herein designated GAM RNA, and which when bound by GAM7957 RNA causes inhibition of translation of respective one or more GAM7957 target proteins.

[54857] It is further appreciated by one skilled in the art that the mode of translational inhibition illustrated by Fig. 8 with specific reference to translational inhibition exerted by GAM7957 gene, herein designated GAM GENE, on one or more GAM7957 target genes, herein collectively designated TARGET GENE, is common to other known miRNA genes. As mentioned hereinabove with reference to the background section, although a specific complementary binding site has been demonstrated only for some of the known miRNA genes (primarily Lin-4 and Let-7), all other recently discovered miRNA genes are also believed by those skilled in the art to modulate expression of other genes by complementary binding, although specific complementary binding sites of these other miRNA genes have not yet been found (Ruvkun G., Perspective: Glimpses of a tiny RNA world, Science 294,779 (2001)).

[54858] It is appreciated that specific functions and accordingly utilities of GAM7957 correlate with, and may be deduced from, the identity of the target genes which GAM7957 binds and inhibits, and the function of these target genes, as elaborated hereinbelow.

[54859]

[54860]

[54861] 15E1.2 (Accession XP_290596.1) is a GAM7957 target gene, herein designated TARGET GENE. 15E1.2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by 15E1.2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of 15E1.2 BINDING SITE, designated SEQ ID:13155, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54862] A function of GAM7957 is therefore inhibition of 15E1.2 (Accession XP_290596.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with 15E1.2.

[54863] 3PAP (Accession NP_061934.2) is another GAM7957 target gene, herein designated TARGET GENE. 3PAP BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by 3PAP, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of 3PAP BINDING SITE, designated SEQ ID:868, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also des-

ignated SEQ ID:297.

[54864] Another function of GAM7957 is therefore inhibition of 3PAP (Accession NP_061934.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with 3PAP.

[54865] Atp-binding cassette, sub-family c (cftr/mrp), member 13 (ABCC13, Accession NP_742021.1) is another GAM7957 target gene, herein designated TARGET GENE. ABCC13 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by ABCC13, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ABCC13 BINDING SITE, designated SEQ ID:2331, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54866] Another function of GAM7957 is therefore inhibition of Atp-binding cassette, sub-family c (cftr/mrp), member 13 (ABCC13, Accession NP_742021.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ABCC13.

[54867] Atp-binding cassette, sub-family f (gcn20), member 2 (ABCF2, Accession NP_009120.1) is another GAM7957 target gene, herein designated TARGET GENE. ABCF2 BINDING SITE1 and ABCF2 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by ABCF2, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ABCF2 BINDING SITE1 and ABCF2 BINDING SITE2, designated SEQ ID:7251 and SEQ ID:3809 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54868] Another function of GAM7957 is therefore inhibition of Atp-binding cassette, sub-family f (gcn20), member 2 (ABCF2, Accession NP_009120.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ABCF2.

[54869] V-abl abelson murine leukemia viral oncogene homolog 1 (ABL1, Accession NP_005148.1) is another GAM7957 target gene, herein designated TARGET GENE. ABL1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by ABL1,

corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ABL1 BINDING SITE, designated SEQ ID:4947, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54870] Another function of GAM7957 is therefore inhibition of V-abl abelson murine leukemia viral oncogene homolog 1 (ABL1, Accession NP_005148.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ABL1.

[54871] V-abl abelson murine leukemia viral oncogene homolog 1 (ABL1, Accession NP_009297.1) is another GAM7957 target gene, herein designated TARGET GENE. ABL1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by ABL1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ABL1 BINDING SITE, designated SEQ ID:4947, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54872] Another function of GAM7957 is therefore inhibition of V-

abl abelson murine leukemia viral oncogene homolog 1 (ABL1, Accession NP_009297.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ABL1.

[54873] Actin binding lim protein 1 (ABLIM1, Accession NP_002304.2) is another GAM7957 target gene, herein designated TARGET GENE. ABLIM1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by ABLIM1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ABLIM1 BINDING SITE, designated SEQ ID:16503, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54874] Another function of GAM7957 is therefore inhibition of Actin binding lim protein 1 (ABLIM1, Accession NP_002304.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ABLIM1.

[54875] Actin binding lim protein 1 (ABLIM1, Accession NP_006711.2) is another GAM7957 target gene, herein designated TARGET GENE. ABLIM1 BINDING SITE is a target

binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by ABLIM1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ABLIM1 BINDING SITE, designated SEQ ID:16503, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54876] Another function of GAM7957 is therefore inhibition of Actin binding lim protein 1 (ABLIM1, Accession NP_006711.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ABLIM1.

[54877] Actin binding lim protein 1 (ABLIM1, Accession NP_006710.2) is another GAM7957 target gene, herein designated TARGET GENE. ABLIM1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by ABLIM1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ABLIM1 BINDING SITE, designated SEQ ID:16503, to the nucleotide sequence of GAM7957 RNA, herein designated

GAM RNA, also designated SEQ ID:297.

[54878] Another function of GAM7957 is therefore inhibition of Actin binding lim protein 1 (ABLIM1, Accession NP_006710.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ABLIM1.

[54879] ACATE2 (Accession NP_036464.1) is another GAM7957 target gene, herein designated TARGET GENE. ACATE2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ACATE2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ACATE2 BINDING SITE, designated SEQ ID:10237, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54880] Another function of GAM7957 is therefore inhibition of ACATE2 (Accession NP_036464.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ACATE2.

[54881] Angiotensin i converting enzyme (peptidyl-dipeptidase a) 1 (ACE, Accession NP_690044.1) is another GAM7957 tar-

get gene, herein designated TARGET GENE. ACE BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by ACE, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ACE BINDING SITE, designated SEQ ID:3398, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54882] Another function of GAM7957 is therefore inhibition of Angiotensin i converting enzyme (peptidyl–dipeptidase a) 1 (ACE, Accession NP_690044.1), a gene which Angiotensin I– converting enzyme (dipeptidyl carboxypeptidase 1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ACE.

[54883] The function of ACE and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM44.1.A disintegrin–like and metalloprotease (reprolysin type) with thrombospondin type 1 motif, 12 (ADAMTS12, Accession NP_112217.1) is another GAM7957 target gene, herein designated TARGET GENE.

ADAMTS12 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by ADAMTS12, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ADAMTS12 BINDING SITE, designated SEQ ID:7897, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54884] Another function of GAM7957 is therefore inhibition of A disintegrin-like and metalloprotease (reprolysin type) with thrombospondin type 1 motif, 12 (ADAMTS12, Accession NP_112217.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ADAMTS12.

[54885] A disintegrin-like and metalloprotease (reprolysin type) with thrombospondin type 1 motif, 4 (ADAMTS4, Accession NP_005090.1) is another GAM7957 target gene, herein designated TARGET GENE. ADAMTS4 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ADAMTS4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the com-

plementarity of the nucleotide sequences of ADAMTS4 BINDING SITE, designated SEQ ID:15594, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54886] Another function of GAM7957 is therefore inhibition of A disintegrin-like and metalloprotease (reprolysin type) with thrombospondin type 1 motif, 4 (ADAMTS4, Accession NP_005090.1), a gene which cleaves aggrecan, a cartilage proteoglycan, and may be involved in its turnover. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ADAMTS4.

[54887] The function of ADAMTS4 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1. ADAR3 (Accession NP_061172.1) is another GAM7957 target gene, herein designated TARGET GENE. ADAR3 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by ADAR3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ADAR3 BINDING SITE, designated SEQ ID:6712, to the

nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54888] Another function of GAM7957 is therefore inhibition of ADAR3 (Accession NP_061172.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ADAR3.

[54889] Adenosine deaminase, trna-specific 1 (ADAT1, Accession NP_036223.1) is another GAM7957 target gene, herein designated TARGET GENE. ADAT1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ADAT1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ADAT1 BINDING SITE, designated SEQ ID:15089, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54890] Another function of GAM7957 is therefore inhibition of Adenosine deaminase, trna-specific 1 (ADAT1, Accession NP_036223.1), a gene which TRNA- specific adenosine deaminase; deaminates A(37) in the anticodon loop of tRNA(Ala). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical

conditions associated with ADAT1.

[54891] The function of ADAT1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM236.1. Adenylate cyclase 1 (brain) (ADCY1, Accession NP_066939.1) is another GAM7957 target gene, herein designated TARGET GENE. ADCY1 BINDING SITE1 and ADCY1 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by ADCY1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ADCY1 BINDING SITE1 and ADCY1 BINDING SITE2, designated SEQ ID:18690 and SEQ ID:17764 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54892] Another function of GAM7957 is therefore inhibition of Adenylate cyclase 1 (brain) (ADCY1, Accession NP_066939.1), a gene which a calmodulin- sensitive adenylyl cyclase. it may play a role in memory acquisition and learning. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clini-

cal conditions associated with ADCY1.

[54893] The function of ADCY1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM144.1. Adenylate cyclase activating polypeptide 1 (pituitary) (ADCYAP1, Accession NP_001108.1) is another GAM7957 target gene, herein designated TARGET GENE. ADCYAP1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ADCYAP1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ADCYAP1 BINDING SITE, designated SEQ ID:13163, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54894] Another function of GAM7957 is therefore inhibition of Adenylate cyclase activating polypeptide 1 (pituitary) (ADCYAP1, Accession NP_001108.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ADCYAP1.

[54895] Alcohol dehydrogenase 4 (class ii), pi polypeptide (ADH4,

Accession NP_000661.1) is another GAM7957 target gene, herein designated TARGET GENE. ADH4 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by ADH4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ADH4 BINDING SITE, designated SEQ ID:8767, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54896] Another function of GAM7957 is therefore inhibition of Alcohol dehydrogenase 4 (class ii), pi polypeptide (ADH4, Accession NP_000661.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ADH4.

[54897] AF020591 (Accession NP_055295.1) is another GAM7957 target gene, herein designated TARGET GENE. AF020591 BINDING SITE1 and AF020591 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by AF020591, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of AF020591 BINDING SITE1 and

AF020591 BINDING SITE2, designated SEQ ID:5252 and SEQ ID:10612 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54898] Another function of GAM7957 is therefore inhibition of AF020591 (Accession NP_055295.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with AF020591.

[54899] Agmatine ureohydrolase (agmatinase) (AGMAT, Accession NP_079034.2) is another GAM7957 target gene, herein designated TARGET GENE. AGMAT BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by AGMAT, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of AGMAT BINDING SITE, designated SEQ ID:17097, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54900] Another function of GAM7957 is therefore inhibition of Agmatine ureohydrolase (agmatinase) (AGMAT, Accession NP_079034.2) . Accordingly, utilities of GAM7957 include

diagnosis, prevention and treatment of diseases and clinical conditions associated with AGMAT.

[54901] Agouti related protein homolog (mouse) (AGRP, Accession NP_001129.1) is another GAM7957 target gene, herein designated TARGET GENE. AGRP BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by AGRP, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of AGRP BINDING SITE, designated SEQ ID:6741, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54902] Another function of GAM7957 is therefore inhibition of Agouti related protein homolog (mouse) (AGRP, Accession NP_001129.1), a gene which plays a role in weight homeostasis. and therefore may be associated with Obesity. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Obesity, and of other diseases and clinical conditions associated with AGRP.

[54903] The function of AGRP and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM385.2.Aryl hydrocarbon receptor (AHR, Accession NP_001612.1) is another GAM7957 target gene, herein designated TARGET GENE. AHR BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by AHR, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of AHR BINDING SITE, designated SEQ ID:4150, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54904] Another function of GAM7957 is therefore inhibition of Aryl hydrocarbon receptor (AHR, Accession NP_001612.1), a gene which plays a role in modulating carcinogenesis through the induction of xenobiotic- metabolizing enzymes and therefore may be associated with Stomach tumors. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Stomach tumors, and of other diseases and clinical conditions associated with AHR.

[54905] The function of AHR and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM30.1.Aryl hydrocarbon receptor interacting protein-like 1 (AIPL1, Accession NP_055151.2) is another GAM7957 target gene, herein designated TARGET GENE. AIPL1 BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by AIPL1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of AIPL1 BINDING SITE, designated SEQ ID:14786, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54906] Another function of GAM7957 is therefore inhibition of Aryl hydrocarbon receptor interacting protein-like 1 (AIPL1, Accession NP_055151.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with AIPL1.

[54907] Autoimmune regulator (automimmune polyendocrinopathy candidiasis ectodermal dystrophy) (AIRE, Accession NP_000374.1) is another GAM7957 target gene, herein designated TARGET GENE. AIRE BINDING SITE is a target binding site found in the 3` untranslated region of multiple transcripts of mRNA encoded by AIRE, corresponding to a target binding site such as BINDING SITE I, BINDING

SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of AIRE BINDING SITE, designated SEQ ID:18688, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54908] Another function of GAM7957 is therefore inhibition of Autoimmune regulator (automimmune polyendocrinopathy candidiasis ectodermal dystrophy) (AIRE, Accession NP_000374.1), a gene which Putative transcription factor; contains two PHD- type zinc finger motifs. and therefore is associated with Autoimmune poly- endocrinopathy syndrome. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Autoimmune poly- endocrinopathy syndrome, and of other diseases and clinical conditions associated with AIRE.

[54909] The function of AIRE and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM347.1.A kinase (prka) anchor protein 11 (AKAP11, Accession NP_652761.1) is another GAM7957 target gene, herein designated TARGET GENE. AKAP11 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by AKAP11, cor-

responding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of AKAP11 BINDING SITE, designated SEQ ID:3323, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54910] Another function of GAM7957 is therefore inhibition of A kinase (prka) anchor protein 11 (AKAP11, Accession NP_652761.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with AKAP11.

[54911] Aldo-keto reductase family 1, member b10 (aldose reductase) (AKR1B10, Accession NP_064695.2) is another GAM7957 target gene, herein designated TARGET GENE. AKR1B10 BINDING SITE1 and AKR1B10 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by AKR1B10, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of AKR1B10 BINDING SITE1 and AKR1B10 BINDING SITE2, designated SEQ ID:10437 and SEQ ID:15089 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated

GAM RNA, also designated SEQ ID:297.

[54912] Another function of GAM7957 is therefore inhibition of Aldo-keto reductase family 1, member b10 (aldose reductase) (AKR1B10, Accession NP_064695.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with AKR1B10.

[54913] Aldo-keto reductase family 1, member d1 (delta 4-3-ketosteroid-5-beta-reductase) (AKR1D1, Accession NP_005980.1) is another GAM7957 target gene, herein designated TARGET GENE. AKR1D1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by AKR1D1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of AKR1D1 BINDING SITE, designated SEQ ID:19497, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54914] Another function of GAM7957 is therefore inhibition of Aldo-keto reductase family 1, member d1 (delta 4-3-ketosteroid-5-beta-reductase) (AKR1D1, Accession NP_005980.1) . Accordingly, utilities of GAM7957 include

diagnosis, prevention and treatment of diseases and clinical conditions associated with AKR1D1.

[54915] Aldehyde dehydrogenase 3 family, member b1 (ALDH3B1, Accession NP_000685.1) is another GAM7957 target gene, herein designated TARGET GENE. ALDH3B1 BINDING SITE1 through ALDH3B1 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by ALDH3B1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ALDH3B1 BINDING SITE1 through ALDH3B1 BINDING SITE3, designated SEQ ID:15516, SEQ ID:14700 and SEQ ID:10057 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54916] Another function of GAM7957 is therefore inhibition of Aldehyde dehydrogenase 3 family, member b1 (ALDH3B1, Accession NP_000685.1), a gene which may play a major role in the detoxification of aldehydes generated by alcohol metabolism and lipid peroxidation. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ALDH3B1.

[54917] The function of ALDH3B1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM223.1. Aldehyde dehydrogenase 5 family, member a1 (succinate-semialdehyde dehydrogenase) (ALDH5A1, Accession NP_733936.1) is another GAM7957 target gene, herein designated TARGET GENE. ALDH5A1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by ALDH5A1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ALDH5A1 BINDING SITE, designated SEQ ID:6817, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54918] Another function of GAM7957 is therefore inhibition of Aldehyde dehydrogenase 5 family, member a1 (succinate-semialdehyde dehydrogenase) (ALDH5A1, Accession NP_733936.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ALDH5A1.

[54919] Aldehyde dehydrogenase 5 family, member a1

(succinate-semialdehyde dehydrogenase) (ALDH5A1, Accession NP_001071.1) is another GAM7957 target gene, herein designated TARGET GENE. ALDH5A1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by ALDH5A1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ALDH5A1 BINDING SITE, designated SEQ ID:6817, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54920] Another function of GAM7957 is therefore inhibition of Aldehyde dehydrogenase 5 family, member a1 (succinate-semialdehyde dehydrogenase) (ALDH5A1, Accession NP_001071.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ALDH5A1.

[54921] Aldehyde dehydrogenase 8 family, member a1 (ALDH8A1, Accession NP_739577.1) is another GAM7957 target gene, herein designated TARGET GENE. ALDH8A1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by

ALDH8A1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ALDH8A1 BINDING SITE, designated SEQ ID:15129, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54922] Another function of GAM7957 is therefore inhibition of Aldehyde dehydrogenase 8 family, member a1 (ALDH8A1, Accession NP_739577.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ALDH8A1.

[54923] Aldehyde dehydrogenase 8 family, member a1 (ALDH8A1, Accession NP_072090.1) is another GAM7957 target gene, herein designated TARGET GENE. ALDH8A1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by ALDH8A1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ALDH8A1 BINDING SITE, designated SEQ ID:15129, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ

ID:297.

[54924] Another function of GAM7957 is therefore inhibition of Aldehyde dehydrogenase 8 family, member a1 (ALDH8A1, Accession NP_072090.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ALDH8A1.

[54925] Alkaline phosphatase, placental (regan isozyme) (ALPP, Accession NP_001623.2) is another GAM7957 target gene, herein designated TARGET GENE. ALPP BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ALPP, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ALPP BINDING SITE, designated SEQ ID:15341, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54926] Another function of GAM7957 is therefore inhibition of Alkaline phosphatase, placental (regan isozyme) (ALPP, Accession NP_001623.2), a gene which is a placental alkaline phosphatase. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ALPP.

[54927] The function of ALPP and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM206.1.Reserved (ALS2CR9, Accession NP_079528.1) is another GAM7957 target gene, herein designated TARGET GENE. ALS2CR9 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by ALS2CR9, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ALS2CR9 BINDING SITE, designated SEQ ID:16955, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54928] Another function of GAM7957 is therefore inhibition of Reserved (ALS2CR9, Accession NP_079528.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ALS2CR9.

[54929] Ac-like transposable element (ALTE, Accession NP_004720.1) is another GAM7957 target gene, herein designated TARGET GENE. ALTE BINDING SITE is a target binding site found in the 3' untranslated region of mRNA

encoded by ALTE, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ALTE BINDING SITE, designated SEQ ID:6238, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54930] Another function of GAM7957 is therefore inhibition of Ac-like transposable element (ALTE, Accession NP_004720.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ALTE.

[54931] ANAPC7 (Accession NP_057322.1) is another GAM7957 target gene, herein designated TARGET GENE. ANAPC7 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by ANAPC7, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ANAPC7 BINDING SITE, designated SEQ ID:17768, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54932] Another function of GAM7957 is therefore inhibition of

ANAPC7 (Accession NP_057322.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ANAPC7.

[54933] ANKFY1 (Accession NP_057460.2) is another GAM7957 target gene, herein designated TARGET GENE. ANKFY1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by ANKFY1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ANKFY1 BINDING SITE, designated SEQ ID:17805, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54934] Another function of GAM7957 is therefore inhibition of ANKFY1 (Accession NP_057460.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ANKFY1.

[54935] Ankylosis, progressive homolog (mouse) (ANKH, Accession NP_473368.1) is another GAM7957 target gene, herein designated TARGET GENE. ANKH BINDING SITE is a

target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by ANKH, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ANKH BINDING SITE, designated SEQ ID:6937, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54936] Another function of GAM7957 is therefore inhibition of Ankylosis, progressive homolog (mouse) (ANKH, Accession NP_473368.1), a gene which regulates intra- and extracellular levels of inorganic pyrophosphate (ppi), probably functioning as ppi transporter. and therefore is associated with Craniometaphyseal dysplasia. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Craniometaphyseal dysplasia, and of other diseases and clinical conditions associated with ANKH.

[54937] The function of ANKH and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM347.2.Acyloxyacyl hydrolase (neutrophil) (AOAH, Accession NP_001628.1) is another GAM7957 target gene, herein designated TARGET GENE. AOA BINDING SITE is a

target binding site found in the 3' untranslated region of mRNA encoded by AOA_H, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of AOA_H BINDING SITE, designated SEQ ID:3636, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54938] Another function of GAM7957 is therefore inhibition of Acyloxyacyl hydrolase (neutrophil) (AOA_H, Accession NP_001628.1), a gene which removes the secondary (acyloxyacyl-linked) fatty acyl chains from the lipid a region of bacterial lipopolysaccharides. and therefore may be associated with Gram-negative bacterium infection. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Gram-negative bacterium infection., and of other diseases and clinical conditions associated with AOA_H.

[54939] The function of AOA_H and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM1255.2.Ap1 gamma subunit binding protein 1 (AP1GBP1, Accession NP_542118.1) is another GAM7957

target gene, herein designated TARGET GENE. AP1GBP1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by AP1GBP1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of AP1GBP1 BINDING SITE, designated SEQ ID:9627, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54940] Another function of GAM7957 is therefore inhibition of Ap1 gamma subunit binding protein 1 (AP1GBP1, Accession NP_542118.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with AP1GBP1.

[54941] AP1S3 (Accession NP_848929.1) is another GAM7957 target gene, herein designated TARGET GENE. AP1S3 BINDING SITE1 and AP1S3 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by AP1S3, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of AP1S3 BINDING

SITE1 and AP1S3 BINDING SITE2, designated SEQ ID:10435 and SEQ ID:14818 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54942] Another function of GAM7957 is therefore inhibition of AP1S3 (Accession NP_848929.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with AP1S3.

[54943] Adaptor-related protein complex 4, sigma 1 subunit (AP4S1, Accession NP_009008.2) is another GAM7957 target gene, herein designated TARGET GENE. AP4S1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by AP4S1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of AP4S1 BINDING SITE, designated SEQ ID:17888, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54944] Another function of GAM7957 is therefore inhibition of Adaptor-related protein complex 4, sigma 1 subunit (AP4S1, Accession NP_009008.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of

diseases and clinical conditions associated with AP4S1.

[54945] APBB3 (Accession NP_006042.2) is another GAM7957 target gene, herein designated TARGET GENE. APBB3 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by APBB3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of APBB3 BINDING SITE, designated SEQ ID:479, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54946] Another function of GAM7957 is therefore inhibition of APBB3 (Accession NP_006042.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with APBB3.

[54947] APBB3 (Accession NP_573422.1) is another GAM7957 target gene, herein designated TARGET GENE. APBB3 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by APBB3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of APBB3 BINDING SITE, designated

SEQ ID:479, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54948] Another function of GAM7957 is therefore inhibition of APBB3 (Accession NP_573422.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with APBB3.

[54949] APBB3 (Accession NP_573419.1) is another GAM7957 target gene, herein designated TARGET GENE. APBB3 BINDING SITE is a target binding site found in the 5` untranslated region of multiple transcripts of mRNA encoded by APBB3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of APBB3 BINDING SITE, designated SEQ ID:479, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54950] Another function of GAM7957 is therefore inhibition of APBB3 (Accession NP_573419.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with APBB3.

[54951] APBB3 (Accession NP_573420.1) is another GAM7957 target gene, herein designated TARGET GENE. APBB3 BINDING SITE is a target binding site found in the 5` untrans-

lated region of multiple transcripts of mRNA encoded by APBB3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of APBB3 BINDING SITE, designated SEQ ID:479, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54952] Another function of GAM7957 is therefore inhibition of APBB3 (Accession NP_573420.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with APBB3.

[54953] APBB3 (Accession NP_573418.1) is another GAM7957 target gene, herein designated TARGET GENE. APBB3 BINDING SITE is a target binding site found in the 5` untranslated region of multiple transcripts of mRNA encoded by APBB3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of APBB3 BINDING SITE, designated SEQ ID:479, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54954] Another function of GAM7957 is therefore inhibition of APBB3 (Accession NP_573418.1) . Accordingly, utilities of

GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with APBB3.

[54955] APBB3 (Accession NP_573421.1) is another GAM7957 target gene, herein designated TARGET GENE. APBB3 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by APBB3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of APBB3 BINDING SITE, designated SEQ ID:479, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54956] Another function of GAM7957 is therefore inhibition of APBB3 (Accession NP_573421.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with APBB3.

[54957] APG10L (Accession NP_113670.1) is another GAM7957 target gene, herein designated TARGET GENE. APG10L BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by APG10L, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

APG10L BINDING SITE, designated SEQ ID:10656, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54958] Another function of GAM7957 is therefore inhibition of APG10L (Accession NP_113670.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with APG10L.

[54959] Apolipoprotein b mrna editing enzyme, catalytic polypeptide-like 3a (APOBEC3A, Accession NP_663745.1) is another GAM7957 target gene, herein designated TARGET GENE. APOBEC3A BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by APOBEC3A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of APOBEC3A BINDING SITE, designated SEQ ID:7049, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54960] Another function of GAM7957 is therefore inhibition of Apolipoprotein b mrna editing enzyme, catalytic polypeptide-like 3a (APOBEC3A, Accession NP_663745.1) . Ac-

cordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with APOBEC3A.

[54961] Apolipoprotein b mRNA editing enzyme, catalytic polypeptide-like 3f (APOBEC3F, Accession NP_660341.2) is another GAM7957 target gene, herein designated TARGET GENE. APOBEC3F BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by APOBEC3F, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of APOBEC3F BINDING SITE, designated SEQ ID:10042, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54962] Another function of GAM7957 is therefore inhibition of Apolipoprotein b mRNA editing enzyme, catalytic polypeptide-like 3f (APOBEC3F, Accession NP_660341.2). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with APOBEC3F.

[54963] Apolipoprotein I, 1 (APOL1, Accession NP_663318.1) is another GAM7957 target gene, herein designated TARGET

GENE. APOL1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by APOL1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of APOL1 BINDING SITE, designated SEQ ID:4061, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54964] Another function of GAM7957 is therefore inhibition of Apolipoprotein I, 1 (APOL1, Accession NP_663318.1), a gene which may participate in reverse cholesterol transport from peripheral cells to the liver. and therefore may be associated with Schizophrenia. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Schizophrenia, and of other diseases and clinical conditions associated with APOL1.

[54965] The function of APOL1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1. Apolipoprotein I, 1 (APOL1, Accession NP_003652.2) is another GAM7957 target gene, herein designated TARGET GENE. APOL1 BINDING SITE is a target

binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by APOL1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of APOL1 BINDING SITE, designated SEQ ID:4061, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54966] Another function of GAM7957 is therefore inhibition of Apolipoprotein I, 1 (APOL1, Accession NP_003652.2), a gene which may participate in reverse cholesterol transport from peripheral cells to the liver. and therefore may be associated with Schizophrenia. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Schizophrenia, and of other diseases and clinical conditions associated with APOL1.

[54967] The function of APOL1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1.APXL2 (Accession NP_597713.1) is another GAM7957 target gene, herein designated TARGET GENE. APXL2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by APXL2, cor-

responding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of APXL2 BINDING SITE, designated SEQ ID:14254, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54968] Another function of GAM7957 is therefore inhibition of APXL2 (Accession NP_597713.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with APXL2.

[54969] Rac/cdc42 guanine nucleotide exchange factor (gef) 6 (ARHGEF6, Accession NP_004831.1) is another GAM7957 target gene, herein designated TARGET GENE. ARHGEF6 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ARHGEF6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ARHGEF6 BINDING SITE, designated SEQ ID:14790, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54970] Another function of GAM7957 is therefore inhibition of Rac/cdc42 guanine nucleotide exchange factor (gef) 6

(ARHGEF6, Accession NP_004831.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ARHGEF6.

[54971] ARLTS1 (Accession NP_612459.1) is another GAM7957 target gene, herein designated TARGET GENE. ARLTS1 BINDING SITE1 and ARLTS1 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by ARLTS1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ARLTS1 BINDING SITE1 and ARLTS1 BINDING SITE2, designated SEQ ID:1904 and SEQ ID:11695 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54972] Another function of GAM7957 is therefore inhibition of ARLTS1 (Accession NP_612459.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ARLTS1.

[54973] Aryl-hydrocarbon receptor nuclear translocator 2 (ARNT2, Accession NP_055677.1) is another GAM7957 target gene, herein designated TARGET GENE. ARNT2 BINDING SITE is a

target binding site found in the 3' untranslated region of mRNA encoded by ARNT2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ARNT2 BINDING SITE, designated SEQ ID:13998, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54974] Another function of GAM7957 is therefore inhibition of Aryl-hydrocarbon receptor nuclear translocator 2 (ARNT2, Accession NP_055677.1), a gene which specifically recognizes the xenobiotic response element (xre). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ARNT2.

[54975] The function of ARNT2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM67.1. Ankyrin repeat and socs box-containing 8 (ASB8, Accession NP_077000.1) is another GAM7957 target gene, herein designated TARGET GENE. ASB8 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ASB8, corresponding to a tar-

get binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ASB8 BINDING SITE, designated SEQ ID:4423, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54976] Another function of GAM7957 is therefore inhibition of Ankyrin repeat and socs box-containing 8 (ASB8, Accession NP_077000.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ASB8.

[54977] ASK (Accession NP_006707.1) is another GAM7957 target gene, herein designated TARGET GENE. ASK BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ASK, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ASK BINDING SITE, designated SEQ ID:838, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54978] Another function of GAM7957 is therefore inhibition of ASK (Accession NP_006707.1) . Accordingly, utilities of

GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ASK.

[54979] Astrotactin 2 (ASTN2, Accession NP_054729.1) is another GAM7957 target gene, herein designated TARGET GENE. ASTN2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ASTN2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ASTN2 BINDING SITE, designated SEQ ID:14819, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54980] Another function of GAM7957 is therefore inhibition of Astrotactin 2 (ASTN2, Accession NP_054729.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ASTN2.

[54981] Atpase, na⁺/k⁺ transporting, alpha 2 (+) polypeptide (ATP1A2, Accession NP_000693.1) is another GAM7957 target gene, herein designated TARGET GENE. ATP1A2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ATP1A2, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ATP1A2 BINDING SITE, designated SEQ ID:15326, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54982] Another function of GAM7957 is therefore inhibition of Atpase, Na^+/K^+ transporting, alpha 2 (+) polypeptide (ATP1A2, Accession NP_000693.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ATP1A2.

[54983] Atpase, $(\text{Na}^+)/\text{K}^+$ transporting, beta 4 polypeptide (ATP1B4, Accession NP_036201.1) is another GAM7957 target gene, herein designated TARGET GENE. ATP1B4 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ATP1B4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ATP1B4 BINDING SITE, designated SEQ ID:13338, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54984] Another function of GAM7957 is therefore inhibition of

ATPase, (na+)/k⁺ transporting, beta 4 polypeptide (ATP1B4, Accession NP_036201.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ATP1B4.

[54985] Axl receptor tyrosine kinase (AXL, Accession NP_068713.2) is another GAM7957 target gene, herein designated TARGET GENE. AXL BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by AXL, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of AXL BINDING SITE, designated SEQ ID:1792, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54986] Another function of GAM7957 is therefore inhibition of Axl receptor tyrosine kinase (AXL, Accession NP_068713.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with AXL.

[54987] Axl receptor tyrosine kinase (AXL, Accession NP_001690.2) is another GAM7957 target gene, herein

designated TARGET GENE. AXL BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by AXL, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of AXL BINDING SITE, designated SEQ ID:1792, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54988] Another function of GAM7957 is therefore inhibition of Axl receptor tyrosine kinase (AXL, Accession NP_001690.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with AXL.

[54989] Udp-gal:betaglcnac beta 1,4- galactosyltransferase, polypeptide 2 (B4GALT2, Accession NP_003771.1) is another GAM7957 target gene, herein designated TARGET GENE. B4GALT2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by B4GALT2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of B4GALT2 BIND-

ING SITE, designated SEQ ID:2774, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54990] Another function of GAM7957 is therefore inhibition of Udp-gal:betaglcnac beta 1,4- galactosyltransferase, polypeptide 2 (B4GALT2, Accession NP_003771.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with B4GALT2.

[54991] Udp-gal:betaglcnac beta 1,4- galactosyltransferase, polypeptide 2 (B4GALT2, Accession NP_085076.1) is another GAM7957 target gene, herein designated TARGET GENE. B4GALT2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by B4GALT2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of B4GALT2 BINDING SITE, designated SEQ ID:2774, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54992] Another function of GAM7957 is therefore inhibition of Udp-gal:betaglcnac beta 1,4- galactosyltransferase,

polypeptide 2 (B4GALT2, Accession NP_085076.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with B4GALT2.

[54993] BANP (Accession NP_524576.1) is another GAM7957 target gene, herein designated TARGET GENE. BANP BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by BANP, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BANP BINDING SITE, designated SEQ ID:13451, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54994] Another function of GAM7957 is therefore inhibition of BANP (Accession NP_524576.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BANP.

[54995] BANP (Accession NP_060339.2) is another GAM7957 target gene, herein designated TARGET GENE. BANP BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by BANP, corresponding to a target binding site such as BINDING

SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BANP BINDING SITE, designated SEQ ID:13451, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54996] Another function of GAM7957 is therefore inhibition of BANP (Accession NP_060339.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BANP.

[54997] Breast cancer anti-estrogen resistance 1 (BCAR1, Accession NP_055382.1) is another GAM7957 target gene, herein designated TARGET GENE. BCAR1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by BCAR1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BCAR1 BINDING SITE, designated SEQ ID:16661, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[54998] Another function of GAM7957 is therefore inhibition of Breast cancer anti-estrogen resistance 1 (BCAR1, Accession NP_055382.1), a gene which plays a role for tyro-

sine- kinase- based signaling to cell adhesion. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BCAR1.

[54999] The function of BCAR1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM234.1. Breast carcinoma amplified sequence 1 (BCAS1, Accession NP_003648.1) is another GAM7957 target gene, herein designated TARGET GENE. BCAS1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by BCAS1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BCAS1 BINDING SITE, designated SEQ ID:13893, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55000] Another function of GAM7957 is therefore inhibition of Breast carcinoma amplified sequence 1 (BCAS1, Accession NP_003648.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BCAS1.

[55001] Bifunctional apoptosis regulator (BFAR, Accession NP_057645.1) is another GAM7957 target gene, herein designated TARGET GENE. BFAR BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by BFAR, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BFAR BINDING SITE, designated SEQ ID:15922, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55002] Another function of GAM7957 is therefore inhibition of Bifunctional apoptosis regulator (BFAR, Accession NP_057645.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BFAR.

[55003] Betaine-homocysteine methyltransferase 2 (BHMT2, Accession NP_060084.2) is another GAM7957 target gene, herein designated TARGET GENE. BHMT2 BINDING SITE1 and BHMT2 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by BHMT2, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of BHMT2 BINDING SITE1 and BHMT2 BINDING SITE2, designated SEQ ID:5830 and SEQ ID:10571 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55004] Another function of GAM7957 is therefore inhibition of Betaine-homocysteine methyltransferase 2 (BHMT2, Accession NP_060084.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BHMT2.

[55005] Baculoviral iap repeat-containing 1 (BIRC1, Accession NP_004527.1) is another GAM7957 target gene, herein designated TARGET GENE. BIRC1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by BIRC1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BIRC1 BINDING SITE, designated SEQ ID:12796, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55006] Another function of GAM7957 is therefore inhibition of Baculoviral iap repeat-containing 1 (BIRC1, Accession

NP_004527.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BIRC1.

[55007] Baculoviral iap repeat-containing 5 (survivin) (BIRC5, Accession NP_001159.1) is another GAM7957 target gene, herein designated TARGET GENE. BIRC5 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by BIRC5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BIRC5 BINDING SITE, designated SEQ ID:1829, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55008] Another function of GAM7957 is therefore inhibition of Baculoviral iap repeat-containing 5 (survivin) (BIRC5, Accession NP_001159.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BIRC5.

[55009] Basic, immunoglobulin-like variable motif containing (BIVM, Accession NP_060163.2) is another GAM7957 target gene, herein designated TARGET GENE. BIVM BINDING SITE is a target binding site found in the 3' untranslated

region of mRNA encoded by BIVM, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BIVM BINDING SITE, designated SEQ ID:14233, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55010] Another function of GAM7957 is therefore inhibition of Basic, immunoglobulin-like variable motif containing (BIVM, Accession NP_060163.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BIVM.

[55011] BMF (Accession NP_277038.1) is another GAM7957 target gene, herein designated TARGET GENE. BMF BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by BMF, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BMF BINDING SITE, designated SEQ ID:1509, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55012] Another function of GAM7957 is therefore inhibition of

BMF (Accession NP_277038.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BMF.

[55013] Bone morphogenetic protein 8 (osteogenic protein 2) (BMP8, Accession NP_001711.2) is another GAM7957 target gene, herein designated TARGET GENE. BMP8 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by BMP8, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BMP8 BINDING SITE, designated SEQ ID:11740, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55014] Another function of GAM7957 is therefore inhibition of Bone morphogenetic protein 8 (osteogenic protein 2) (BMP8, Accession NP_001711.2), a gene which plays a role in calcium regulation and bone homeostasis. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BMP8.

[55015] The function of BMP8 and its association with various diseases and clinical conditions, has been established by

previous studies, as described hereinabove with reference to GAM347.1.3'(2'), 5'-bisphosphate nucleotidase 1 (BPNT1, Accession XP_035738.1) is another GAM7957 target gene, herein designated TARGET GENE. BPNT1 BINDING SITE1 and BPNT1 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by BPNT1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BPNT1 BINDING SITE1 and BPNT1 BINDING SITE2, designated SEQ ID:3936 and SEQ ID:3605 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55016] Another function of GAM7957 is therefore inhibition of 3'(2'), 5'-bisphosphate nucleotidase 1 (BPNT1, Accession XP_035738.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BPNT1.

[55017] Breast cancer 1, early onset (BRCA1, Accession NP_009229.1) is another GAM7957 target gene, herein designated TARGET GENE. BRCA1 BINDING SITE1 and BRCA1 BINDING SITE2 are target binding sites found in

untranslated regions of multiple transcripts of mRNA encoded by BRCA1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BRCA1 BINDING SITE1 and BRCA1 BINDING SITE2, designated SEQ ID:19976 and SEQ ID:19976 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55018] Another function of GAM7957 is therefore inhibition of Breast cancer 1, early onset (BRCA1, Accession NP_009229.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BRCA1.

[55019] Breast cancer 1, early onset (BRCA1, Accession NP_009231.1) is another GAM7957 target gene, herein designated TARGET GENE. BRCA1 BINDING SITE1 and BRCA1 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by BRCA1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BRCA1 BINDING SITE1 and BRCA1

BINDING SITE2, designated SEQ ID:19976 and SEQ ID:19976 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55020] Another function of GAM7957 is therefore inhibition of Breast cancer 1, early onset (BRCA1, Accession NP_009231.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BRCA1.

[55021] Breast cancer 1, early onset (BRCA1, Accession NP_009232.1) is another GAM7957 target gene, herein designated TARGET GENE. BRCA1 BINDING SITE1 and BRCA1 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by BRCA1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BRCA1 BINDING SITE1 and BRCA1 BINDING SITE2, designated SEQ ID:19976 and SEQ ID:19976 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55022] Another function of GAM7957 is therefore inhibition of

Breast cancer 1, early onset (BRCA1, Accession NP_009232.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BRCA1.

[55023] Breast cancer 1, early onset (BRCA1, Accession NP_009230.1) is another GAM7957 target gene, herein designated TARGET GENE. BRCA1 BINDING SITE1 and BRCA1 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by BRCA1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BRCA1 BINDING SITE1 and BRCA1 BINDING SITE2, designated SEQ ID:19976 and SEQ ID:19976 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55024] Another function of GAM7957 is therefore inhibition of Breast cancer 1, early onset (BRCA1, Accession NP_009230.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BRCA1.

[55025] Breast cancer 1, early onset (BRCA1, Accession

NP_009235.1) is another GAM7957 target gene, herein designated TARGET GENE. BRCA1 BINDING SITE1 and BRCA1 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by BRCA1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BRCA1 BINDING SITE1 and BRCA1 BINDING SITE2, designated SEQ ID:19976 and SEQ ID:19976 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55026] Another function of GAM7957 is therefore inhibition of Breast cancer 1, early onset (BRCA1, Accession NP_009235.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BRCA1.

[55027] Breast cancer 1, early onset (BRCA1, Accession NP_009236.1) is another GAM7957 target gene, herein designated TARGET GENE. BRCA1 BINDING SITE1 and BRCA1 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by BRCA1, corresponding to target binding sites

such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BRCA1 BINDING SITE1 and BRCA1 BINDING SITE2, designated SEQ ID:19976 and SEQ ID:9421 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55028] Another function of GAM7957 is therefore inhibition of Breast cancer 1, early onset (BRCA1, Accession NP_009236.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BRCA1.

[55029] Breast cancer 1, early onset (BRCA1, Accession NP_009225.1) is another GAM7957 target gene, herein designated TARGET GENE. BRCA1 BINDING SITE1 and BRCA1 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by BRCA1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BRCA1 BINDING SITE1 and BRCA1 BINDING SITE2, designated SEQ ID:19976 and SEQ ID:19976 respectively, to the nucleotide sequence of

GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55030] Another function of GAM7957 is therefore inhibition of Breast cancer 1, early onset (BRCA1, Accession NP_009225.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BRCA1.

[55031] Btb (poz) domain containing 5 (BTBD5, Accession NP_060128.1) is another GAM7957 target gene, herein designated TARGET GENE. BTBD5 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by BTBD5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BTBD5 BINDING SITE, designated SEQ ID:1201, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55032] Another function of GAM7957 is therefore inhibition of Btb (poz) domain containing 5 (BTBD5, Accession NP_060128.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BTBD5.

[55033] Butyrophilin, subfamily 3, member a2 (BTN3A2, Accession NP_008978.1) is another GAM7957 target gene, herein designated TARGET GENE. BTN3A2 BINDING SITE1 and BTN3A2 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by BTN3A2, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BTN3A2 BINDING SITE1 and BTN3A2 BINDING SITE2, designated SEQ ID:14305 and SEQ ID:15108 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55034] Another function of GAM7957 is therefore inhibition of Butyrophilin, subfamily 3, member a2 (BTN3A2, Accession NP_008978.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BTN3A2.

[55035] Chromosome 12 open reading frame 2 (C12orf2, Accession NP_009142.2) is another GAM7957 target gene, herein designated TARGET GENE. C12orf2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C12orf2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or

BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C12orf2 BINDING SITE, designated SEQ ID:9765, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55036] Another function of GAM7957 is therefore inhibition of Chromosome 12 open reading frame 2 (C12orf2, Accession NP_009142.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C12orf2.

[55037] Chromosome 13 open reading frame 1 (C13orf1, Accession NP_065189.1) is another GAM7957 target gene, herein designated TARGET GENE. C13orf1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C13orf1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C13orf1 BINDING SITE, designated SEQ ID:13358, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55038] Another function of GAM7957 is therefore inhibition of Chromosome 13 open reading frame 1 (C13orf1, Acces-

sion NP_065189.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C13orf1.

[55039] C14orf102 (Accession NP_060440.1) is another GAM7957 target gene, herein designated TARGET GENE. C14orf102 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C14orf102, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C14orf102 BINDING SITE, designated SEQ ID:11463, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55040] Another function of GAM7957 is therefore inhibition of C14orf102 (Accession NP_060440.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C14orf102.

[55041] C14orf105 (Accession NP_060638.1) is another GAM7957 target gene, herein designated TARGET GENE. C14orf105 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C14orf105, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C14orf105 BINDING SITE, designated SEQ ID:13632, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55042] Another function of GAM7957 is therefore inhibition of C14orf105 (Accession NP_060638.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C14orf105.

[55043] C14orf117 (Accession NP_061148.1) is another GAM7957 target gene, herein designated TARGET GENE. C14orf117 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C14orf117, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C14orf117 BINDING SITE, designated SEQ ID:4003, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55044] Another function of GAM7957 is therefore inhibition of C14orf117 (Accession NP_061148.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with C14orf117.

[55045] C14orf139 (Accession NP_078909.1) is another GAM7957 target gene, herein designated TARGET GENE. C14orf139 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C14orf139, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C14orf139 BINDING SITE, designated SEQ ID:19330, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55046] Another function of GAM7957 is therefore inhibition of C14orf139 (Accession NP_078909.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C14orf139.

[55047] C14orf143 (Accession NP_660274.1) is another GAM7957 target gene, herein designated TARGET GENE. C14orf143 BINDING SITE1 and C14orf143 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by C14orf143, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C14orf143 BINDING SITE1 and C14orf143 BINDING SITE2, designated SEQ ID:2780 and SEQ ID:4559 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55048] Another function of GAM7957 is therefore inhibition of C14orf143 (Accession NP_660274.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C14orf143.

[55049] Chromosome 14 open reading frame 23 (C14orf23, Accession XP_096757.2) is another GAM7957 target gene, herein designated TARGET GENE. C14orf23 BINDING SITE1 and C14orf23 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by C14orf23, corresponding to target binding sites such as

BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C14orf23 BINDING SITE1 and C14orf23 BINDING SITE2, designated SEQ ID:13155 and SEQ ID:8019 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55050] Another function of GAM7957 is therefore inhibition of Chromosome 14 open reading frame 23 (C14orf23, Accession XP_096757.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C14orf23.

[55051] C14orf24 (Accession NP_775878.1) is another GAM7957 target gene, herein designated TARGET GENE. C14orf24 BINDING SITE1 and C14orf24 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by C14orf24, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C14orf24 BINDING SITE1 and C14orf24 BINDING SITE2, designated SEQ ID:7122 and SEQ ID:16828 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also design-

nated SEQ ID:297.

[55052] Another function of GAM7957 is therefore inhibition of C14orf24 (Accession NP_775878.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C14orf24.

[55053] Chromosome 14 open reading frame 4 (C14orf4, Accession XP_041104.1) is another GAM7957 target gene, herein designated TARGET GENE. C14orf4 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by C14orf4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C14orf4 BINDING SITE, designated SEQ ID:10582, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55054] Another function of GAM7957 is therefore inhibition of Chromosome 14 open reading frame 4 (C14orf4, Accession XP_041104.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C14orf4.

[55055] Chromosome 14 open reading frame 43 (C14orf43, Ac-

cession XP_040343.3) is another GAM7957 target gene, herein designated TARGET GENE. C14orf43 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C14orf43, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C14orf43 BINDING SITE, designated SEQ ID:14786, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55056] Another function of GAM7957 is therefore inhibition of Chromosome 14 open reading frame 43 (C14orf43, Accession XP_040343.3) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C14orf43.

[55057] Chromosome 14 open reading frame 46 (C14orf46, Accession XP_040376.1) is another GAM7957 target gene, herein designated TARGET GENE. C14orf46 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C14orf46, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C14orf46

BINDING SITE, designated SEQ ID:4702, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55058] Another function of GAM7957 is therefore inhibition of Chromosome 14 open reading frame 46 (C14orf46, Accession XP_040376.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C14orf46.

[55059] C14orf70 (Accession XP_211096.1) is another GAM7957 target gene, herein designated TARGET GENE. C14orf70 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by C14orf70, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C14orf70 BINDING SITE, designated SEQ ID:14106, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55060] Another function of GAM7957 is therefore inhibition of C14orf70 (Accession XP_211096.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C14orf70.

[55061] Chromosome 1 open reading frame 24 (C1orf24, Accession NP_443198.1) is another GAM7957 target gene, herein designated TARGET GENE. C1orf24 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by C1orf24, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C1orf24 BINDING SITE, designated SEQ ID:10419, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55062] Another function of GAM7957 is therefore inhibition of Chromosome 1 open reading frame 24 (C1orf24, Accession NP_443198.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C1orf24.

[55063] Chromosome 1 open reading frame 33 (C1orf33, Accession NP_057267.2) is another GAM7957 target gene, herein designated TARGET GENE. C1orf33 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C1orf33, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the comple-

mentarity of the nucleotide sequences of C1orf33 BINDING SITE, designated SEQ ID:15057, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55064] Another function of GAM7957 is therefore inhibition of Chromosome 1 open reading frame 33 (C1orf33, Accession NP_057267.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C1orf33.

[55065] Chromosome 1 open reading frame 34 (C1orf34, Accession XP_027172.1) is another GAM7957 target gene, herein designated TARGET GENE. C1orf34 BINDING SITE1 and C1orf34 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by C1orf34, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C1orf34 BINDING SITE1 and C1orf34 BINDING SITE2, designated SEQ ID:18827 and SEQ ID:18691 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55066] Another function of GAM7957 is therefore inhibition of Chromosome 1 open reading frame 34 (C1orf34, Acces-

sion XP_027172.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C1orf34.

[55067] Chromosome 20 open reading frame 108 (C20orf108, Accession NP_543011.1) is another GAM7957 target gene, herein designated TARGET GENE. C20orf108 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C20orf108, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C20orf108 BINDING SITE, designated SEQ ID:9763, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55068] Another function of GAM7957 is therefore inhibition of Chromosome 20 open reading frame 108 (C20orf108, Accession NP_543011.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C20orf108.

[55069] Chromosome 20 open reading frame 12 (C20orf12, Accession NP_060622.2) is another GAM7957 target gene, herein designated TARGET GENE. C20orf12 BINDING SITE is a target binding site found in the 3' untranslated re-

gion of mRNA encoded by C20orf12, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C20orf12 BINDING SITE, designated SEQ ID:4680, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55070] Another function of GAM7957 is therefore inhibition of Chromosome 20 open reading frame 12 (C20orf12, Accession NP_060622.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C20orf12.

[55071] Chromosome 20 open reading frame 142 (C20orf142, Accession XP_300782.1) is another GAM7957 target gene, herein designated TARGET GENE. C20orf142 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C20orf142, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C20orf142 BINDING SITE, designated SEQ ID:12434, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55072] Another function of GAM7957 is therefore inhibition of Chromosome 20 open reading frame 142 (C20orf142, Accession XP_300782.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C20orf142.

[55073] Chromosome 20 open reading frame 172 (C20orf172, Accession NP_079194.2) is another GAM7957 target gene, herein designated TARGET GENE. C20orf172 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C20orf172, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C20orf172 BINDING SITE, designated SEQ ID:5441, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55074] Another function of GAM7957 is therefore inhibition of Chromosome 20 open reading frame 172 (C20orf172, Accession NP_079194.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C20orf172.

[55075] Chromosome 20 open reading frame 175 (C20orf175, Accession NP_543019.1) is another GAM7957 target gene,

herein designated TARGET GENE. C20orf175 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C20orf175, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C20orf175 BINDING SITE, designated SEQ ID:2547, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55076] Another function of GAM7957 is therefore inhibition of Chromosome 20 open reading frame 175 (C20orf175, Accession NP_543019.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C20orf175.

[55077] Chromosome 20 open reading frame 177 (C20orf177, Accession XP_290955.1) is another GAM7957 target gene, herein designated TARGET GENE. C20orf177 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C20orf177, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C20orf177 BINDING SITE, designated SEQ ID:18683, to the nucleotide

sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55078] Another function of GAM7957 is therefore inhibition of Chromosome 20 open reading frame 177 (C20orf177, Accession XP_290955.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C20orf177.

[55079] Chromosome 20 open reading frame 29 (C20orf29, Accession NP_060817.1) is another GAM7957 target gene, herein designated TARGET GENE. C20orf29 BINDING SITE1 and C20orf29 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by C20orf29, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C20orf29 BINDING SITE1 and C20orf29 BINDING SITE2, designated SEQ ID:17737 and SEQ ID:19584 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55080] Another function of GAM7957 is therefore inhibition of Chromosome 20 open reading frame 29 (C20orf29, Accession NP_060817.1) . Accordingly, utilities of GAM7957

include diagnosis, prevention and treatment of diseases and clinical conditions associated with C20orf29.

[55081] Chromosome 21 open reading frame 108 (C21orf108, Accession XP_114191.2) is another GAM7957 target gene, herein designated TARGET GENE. C21orf108 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C21orf108, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C21orf108 BINDING SITE, designated SEQ ID:5823, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55082] Another function of GAM7957 is therefore inhibition of Chromosome 21 open reading frame 108 (C21orf108, Accession XP_114191.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C21orf108.

[55083] Chromosome 21 open reading frame 62 (C21orf62, Accession NP_062542.1) is another GAM7957 target gene, herein designated TARGET GENE. C21orf62 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by C21orf62, corresponding to a

target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C21orf62 BINDING SITE, designated SEQ ID:8800, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55084] Another function of GAM7957 is therefore inhibition of Chromosome 21 open reading frame 62 (C21orf62, Accession NP_062542.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C21orf62.

[55085] Chromosome 21 open reading frame 97 (C21orf97, Accession NP_068760.1) is another GAM7957 target gene, herein designated TARGET GENE. C21orf97 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C21orf97, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C21orf97 BINDING SITE, designated SEQ ID:14711, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55086] Another function of GAM7957 is therefore inhibition of

Chromosome 21 open reading frame 97 (C21orf97, Accession NP_068760.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C21orf97.

[55087] Chromosome 22 open reading frame 19 (C22orf19, Accession NP_003669.2) is another GAM7957 target gene, herein designated TARGET GENE. C22orf19 BINDING SITE1 through C22orf19 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by C22orf19, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C22orf19 BINDING SITE1 through C22orf19 BINDING SITE3, designated SEQ ID:4658, SEQ ID:9519 and SEQ ID:15217 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55088] Another function of GAM7957 is therefore inhibition of Chromosome 22 open reading frame 19 (C22orf19, Accession NP_003669.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C22orf19.

[55089] Chromosome 22 open reading frame 20 (C22orf20, Ac-

cession NP_079501.2) is another GAM7957 target gene, herein designated TARGET GENE. C22orf20 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C22orf20, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C22orf20 BINDING SITE, designated SEQ ID:18684, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55090] Another function of GAM7957 is therefore inhibition of Chromosome 22 open reading frame 20 (C22orf20, Accession NP_079501.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C22orf20.

[55091] C6orf149 (Accession NP_065141.2) is another GAM7957 target gene, herein designated TARGET GENE. C6orf149 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C6orf149, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C6orf149 BINDING SITE, designated SEQ ID:1454, to the

nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55092] Another function of GAM7957 is therefore inhibition of C6orf149 (Accession NP_065141.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C6orf149.

[55093] C6orf150 (Accession NP_612450.1) is another GAM7957 target gene, herein designated TARGET GENE. C6orf150 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C6orf150, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C6orf150 BINDING SITE, designated SEQ ID:14568, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55094] Another function of GAM7957 is therefore inhibition of C6orf150 (Accession NP_612450.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C6orf150.

[55095] C6orf166 (Accession NP_060534.1) is another GAM7957

target gene, herein designated TARGET GENE. C6orf166 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by C6orf166, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C6orf166 BINDING SITE, designated SEQ ID:10236, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55096] Another function of GAM7957 is therefore inhibition of C6orf166 (Accession NP_060534.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C6orf166.

[55097] Chromosome 6 open reading frame 29 (C6orf29, Accession NP_116183.1) is another GAM7957 target gene, herein designated TARGET GENE. C6orf29 BINDING SITE1 and C6orf29 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by C6orf29, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C6orf29 BINDING SITE1 and

C6orf29 BINDING SITE2, designated SEQ ID:10438 and SEQ ID:5830 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55098] Another function of GAM7957 is therefore inhibition of Chromosome 6 open reading frame 29 (C6orf29, Accession NP_116183.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C6orf29.

[55099] C6orf5 (Accession NP_056339.2) is another GAM7957 target gene, herein designated TARGET GENE. C6orf5 BINDING SITE1 through C6orf5 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by C6orf5, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C6orf5 BINDING SITE1 through C6orf5 BINDING SITE3, designated SEQ ID:1492, SEQ ID:10438 and SEQ ID:2576 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55100] Another function of GAM7957 is therefore inhibition of C6orf5 (Accession NP_056339.2) . Accordingly, utilities of

GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C6orf5.

[55101] C6orf57 (Accession NP_660310.1) is another GAM7957 target gene, herein designated TARGET GENE. C6orf57 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C6orf57, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C6orf57 BINDING SITE, designated SEQ ID:17417, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55102] Another function of GAM7957 is therefore inhibition of C6orf57 (Accession NP_660310.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C6orf57.

[55103] C6orf96 (Accession NP_060379.1) is another GAM7957 target gene, herein designated TARGET GENE. C6orf96 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C6orf96, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of C6orf96 BINDING SITE, designated SEQ ID:15978, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55104] Another function of GAM7957 is therefore inhibition of C6orf96 (Accession NP_060379.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C6orf96.

[55105] Chromosome 7 open reading frame 3 (C7orf3, Accession XP_049384.6) is another GAM7957 target gene, herein designated TARGET GENE. C7orf3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C7orf3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C7orf3 BINDING SITE, designated SEQ ID:11428, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55106] Another function of GAM7957 is therefore inhibition of Chromosome 7 open reading frame 3 (C7orf3, Accession XP_049384.6) . Accordingly, utilities of GAM7957 include

diagnosis, prevention and treatment of diseases and clinical conditions associated with C7orf3.

[55107] Chromosome 8 open reading frame 17 (C8orf17, Accession NP_064622.1) is another GAM7957 target gene, herein designated TARGET GENE. C8orf17 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C8orf17, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C8orf17 BINDING SITE, designated SEQ ID:19452, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55108] Another function of GAM7957 is therefore inhibition of Chromosome 8 open reading frame 17 (C8orf17, Accession NP_064622.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C8orf17.

[55109] Chromosome 9 open reading frame 5 (C9orf5, Accession NP_114401.1) is another GAM7957 target gene, herein designated TARGET GENE. C9orf5 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C9orf5, corresponding to a target binding site

such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C9orf5 BINDING SITE, designated SEQ ID:2784, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55110] Another function of GAM7957 is therefore inhibition of Chromosome 9 open reading frame 5 (C9orf5, Accession NP_114401.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C9orf5.

[55111] CAB56184 (Accession NP_115909.1) is another GAM7957 target gene, herein designated TARGET GENE. CAB56184 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CAB56184, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CAB56184 BINDING SITE, designated SEQ ID:18474, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55112] Another function of GAM7957 is therefore inhibition of CAB56184 (Accession NP_115909.1) . Accordingly, utili-

ties of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CAB56184.

[55113] Calcium channel, voltage-dependent, gamma subunit 1 (CACNG1, Accession NP_000718.1) is another GAM7957 target gene, herein designated TARGET GENE. CACNG1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CACNG1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CACNG1 BINDING SITE, designated SEQ ID:7002, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55114] Another function of GAM7957 is therefore inhibition of Calcium channel, voltage-dependent, gamma subunit 1 (CACNG1, Accession NP_000718.1), a gene which plays a role in excitation-contraction coupling. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CACNG1.

[55115] The function of CACNG1 and its association with various diseases and clinical conditions, has been established by

previous studies, as described hereinabove with reference to GAM40.2.CAM-KIIN (Accession NP_150284.1) is another GAM7957 target gene, herein designated TARGET GENE. CAM-KIIN BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by CAM-KIIN, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CAM-KIIN BINDING SITE, designated SEQ ID:10376, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55116] Another function of GAM7957 is therefore inhibition of CAM-KIIN (Accession NP_150284.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CAM-KIIN.

[55117] Calcium/calmodulin-dependent protein kinase kinase 1, alpha (CAMKK1, Accession NP_115670.1) is another GAM7957 target gene, herein designated TARGET GENE. CAMKK1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CAMKK1, corresponding to a target binding

site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CAMKK1 BINDING SITE, designated SEQ ID:8891, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55118] Another function of GAM7957 is therefore inhibition of Calcium/calmodulin-dependent protein kinase kinase 1, alpha (CAMKK1, Accession NP_115670.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CAMKK1.

[55119] Calcium/calmodulin-dependent protein kinase kinase 1, alpha (CAMKK1, Accession NP_757343.1) is another GAM7957 target gene, herein designated TARGET GENE. CAMKK1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CAMKK1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CAMKK1 BINDING SITE, designated SEQ ID:8891, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also design-

nated SEQ ID:297.

[55120] Another function of GAM7957 is therefore inhibition of Calcium/calmodulin-dependent protein kinase kinase 1, alpha (CAMKK1, Accession NP_757343.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CAMKK1.

[55121] Calcium/calmodulin-dependent protein kinase kinase 2, beta (CAMKK2, Accession NP_006540.3) is another GAM7957 target gene, herein designated TARGET GENE. CAMKK2 BINDING SITE1 and CAMKK2 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by CAMKK2, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CAMKK2 BINDING SITE1 and CAMKK2 BINDING SITE2, designated SEQ ID:6443 and SEQ ID:6443 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55122] Another function of GAM7957 is therefore inhibition of Calcium/calmodulin-dependent protein kinase kinase 2, beta (CAMKK2, Accession NP_006540.3) . Accordingly,

utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CAMKK2.

[55123] Calcium/calmodulin-dependent protein kinase kinase 2, beta (CAMKK2, Accession NP_757363.1) is another GAM7957 target gene, herein designated TARGET GENE. CAMKK2 BINDING SITE1 and CAMKK2 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by CAMKK2, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CAMKK2 BINDING SITE1 and CAMKK2 BINDING SITE2, designated SEQ ID:6443 and SEQ ID:6443 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55124] Another function of GAM7957 is therefore inhibition of Calcium/calmodulin-dependent protein kinase kinase 2, beta (CAMKK2, Accession NP_757363.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CAMKK2.

[55125] Calcium/calmodulin-dependent protein kinase kinase 2,

beta (CAMKK2, Accession NP_757365.1) is another GAM7957 target gene, herein designated TARGET GENE. CAMKK2 BINDING SITE1 and CAMKK2 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by CAMKK2, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CAMKK2 BINDING SITE1 and CAMKK2 BINDING SITE2, designated SEQ ID:6443 and SEQ ID:9311 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55126] Another function of GAM7957 is therefore inhibition of Calcium/calmodulin-dependent protein kinase kinase 2, beta (CAMKK2, Accession NP_757365.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CAMKK2.

[55127] Calcium/calmodulin-dependent protein kinase kinase 2, beta (CAMKK2, Accession NP_757364.1) is another GAM7957 target gene, herein designated TARGET GENE. CAMKK2 BINDING SITE1 and CAMKK2 BINDING SITE2 are target binding sites found in untranslated regions of mul-

multiple transcripts of mRNA encoded by CAMKK2, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CAMKK2 BINDING SITE1 and CAMKK2 BINDING SITE2, designated SEQ ID:6443 and SEQ ID:16561 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55128] Another function of GAM7957 is therefore inhibition of Calcium/calmodulin-dependent protein kinase kinase 2, beta (CAMKK2, Accession NP_757364.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CAMKK2.

[55129] Calpain, small subunit 1 (CAPNS1, Accession NP_001740.1) is another GAM7957 target gene, herein designated TARGET GENE. CAPNS1 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by CAPNS1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CAPNS1 BINDING SITE, designated SEQ ID:16623, to the nucleotide se-

quence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55130] Another function of GAM7957 is therefore inhibition of Calpain, small subunit 1 (CAPNS1, Accession NP_001740.1), a gene which calcium- regulated non-lysosomal thiol- protease which catalyze limited proteolysis of substrates involved in cytoskeletal remodelling and signal transduction. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CAPNS1.

[55131] The function of CAPNS1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM496.1.Carbohydrate kinase-like (CARKL, Accession NP_037408.1) is another GAM7957 target gene, herein designated TARGET GENE. CARKL BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CARKL, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CARKL BINDING SITE, designated SEQ ID:13435, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ

ID:297.

[55132] Another function of GAM7957 is therefore inhibition of Carbohydrate kinase-like (CARKL, Accession NP_037408.1), a gene which is a putative carbohydrate kinase and may be a modifier for the cystinosis phenotype. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CARKL.

[55133] The function of CARKL and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM190.1. Caspase 10, apoptosis-related cysteine protease (CASP10, Accession NP_001221.1) is another GAM7957 target gene, herein designated TARGET GENE. CASP10 BINDING SITE1 and CASP10 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by CASP10, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CASP10 BINDING SITE1 and CASP10 BINDING SITE2, designated SEQ ID:1694 and SEQ ID:1694 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated

GAM RNA, also designated SEQ ID:297.

[55134] Another function of GAM7957 is therefore inhibition of Caspase 10, apoptosis-related cysteine protease (CASP10, Accession NP_001221.1), a gene which is one aspartate-specific cysteine protease and important in death receptor signaling or other cellular processes. and therefore may be associated with Gastric cancers . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Gastric cancers ., and of other diseases and clinical conditions associated with CASP10.

[55135] The function of CASP10 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM44.1.Caspase 10, apoptosis-related cysteine protease (CASP10, Accession NP_116759.1) is another GAM7957 target gene, herein designated TARGET GENE. CASP10 BINDING SITE1 and CASP10 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by CASP10, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CASP10 BINDING SITE1 and CASP10 BINDING SITE2, design-

nated SEQ ID:17083 and SEQ ID:17083 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55136] Another function of GAM7957 is therefore inhibition of Caspase 10, apoptosis-related cysteine protease (CASP10, Accession NP_116759.1), a gene which is one aspartate-specific cysteine protease and important in death receptor signaling or other cellular processes. and therefore may be associated with Gastric cancers . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Gastric cancers ., and of other diseases and clinical conditions associated with CASP10.

[55137] The function of CASP10 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM44.1.Caspase 10, apoptosis-related cysteine protease (CASP10, Accession NP_116758.1) is another GAM7957 target gene, herein designated TARGET GENE. CASP10 BINDING SITE1 and CASP10 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by CASP10, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of CASP10 BINDING SITE1 and CASP10 BINDING SITE2, designated SEQ ID:1694 and SEQ ID:17083 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55138] Another function of GAM7957 is therefore inhibition of Caspase 10, apoptosis-related cysteine protease (CASP10, Accession NP_116758.1), a gene which is one aspartate-specific cysteine protease and important in death receptor signaling or other cellular processes. and therefore may be associated with Gastric cancers . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Gastric cancers ., and of other diseases and clinical conditions associated with CASP10.

[55139] The function of CASP10 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM44.1.Caspase 8, apoptosis-related cysteine protease (CASP8, Accession NP_203521.1) is another GAM7957 target gene, herein designated TARGET GENE. CASP8 BINDING SITE is a target binding site found in the 5` untranslated region of multiple transcripts of mRNA encoded by CASP8, corresponding to a target binding site

such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CASP8 BINDING SITE, designated SEQ ID:7316, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55140] Another function of GAM7957 is therefore inhibition of Caspase 8, apoptosis-related cysteine protease (CASP8, Accession NP_203521.1), a gene which is an apoptosis-related caspase and an upstream component of Fas receptor and tumor necrosis factor (TNF) receptor-induced apoptosis. and therefore may be associated with Huntington-related neurodegenerative diseases. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Huntington-related neurodegenerative diseases, and of other diseases and clinical conditions associated with CASP8.

[55141] The function of CASP8 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM72.1. Caspase 8, apoptosis-related cysteine protease (CASP8, Accession NP_203519.1) is another GAM7957 target gene, herein designated TARGET GENE.

CASP8 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by CASP8, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CASP8 BINDING SITE, designated SEQ ID:7316, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55142] Another function of GAM7957 is therefore inhibition of Caspase 8, apoptosis-related cysteine protease (CASP8, Accession NP_203519.1), a gene which is an apoptosis-related caspase and an upstream component of Fas receptor and tumor necrosis factor (TNF) receptor-induced apoptosis. and therefore may be associated with Huntington-related neurodegenerative diseases. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Huntington-related neurodegenerative diseases, and of other diseases and clinical conditions associated with CASP8.

[55143] The function of CASP8 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM72.1.CBCIP2 (Accession NP_116220.1) is another GAM7957 target gene, herein designated TARGET GENE. CBCIP2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CBCIP2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CBCIP2 BINDING SITE, designated SEQ ID:614, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55144] Another function of GAM7957 is therefore inhibition of CBCIP2 (Accession NP_116220.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CBCIP2.

[55145] Chemokine (c-c motif) ligand 5 (CCL5, Accession NP_002976.2) is another GAM7957 target gene, herein designated TARGET GENE. CCL5 BINDING SITE1 through CCL5 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by CCL5, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CCL5 BINDING SITE1 through CCL5 BINDING SITE3, design-

nated SEQ ID:3753, SEQ ID:15343 and SEQ ID:13155 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55146] Another function of GAM7957 is therefore inhibition of Chemokine (c-c motif) ligand 5 (CCL5, Accession NP_002976.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CCL5.

[55147] CCNL2 (Accession NP_112199.1) is another GAM7957 target gene, herein designated TARGET GENE. CCNL2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CCNL2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CCNL2 BINDING SITE, designated SEQ ID:2911, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55148] Another function of GAM7957 is therefore inhibition of CCNL2 (Accession NP_112199.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CCNL2.

[55149] Chemokine (c-c motif) receptor 6 (CCR6, Accession

NP_004358.1) is another GAM7957 target gene, herein designated TARGET GENE. CCR6 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CCR6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CCR6 BINDING SITE, designated SEQ ID:12792, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55150] Another function of GAM7957 is therefore inhibition of Chemokine (c-c motif) receptor 6 (CCR6, Accession NP_004358.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CCR6.

[55151] Chemokine (c-c motif) receptor 6 (CCR6, Accession NP_113597.1) is another GAM7957 target gene, herein designated TARGET GENE. CCR6 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CCR6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CCR6

BINDING SITE, designated SEQ ID:12792, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55152] Another function of GAM7957 is therefore inhibition of Chemokine (c-c motif) receptor 6 (CCR6, Accession NP_113597.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CCR6.

[55153] Cd19 antigen (CD19, Accession NP_001761.2) is another GAM7957 target gene, herein designated TARGET GENE. CD19 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CD19, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CD19 BINDING SITE, designated SEQ ID:8851, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55154] Another function of GAM7957 is therefore inhibition of Cd19 antigen (CD19, Accession NP_001761.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CD19.

[55155] Cd28 antigen (tp44) (CD28, Accession NP_006130.1) is another GAM7957 target gene, herein designated TARGET GENE. CD28 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CD28, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CD28 BINDING SITE, designated SEQ ID:13593, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55156] Another function of GAM7957 is therefore inhibition of Cd28 antigen (tp44) (CD28, Accession NP_006130.1), a gene which possibly involved in t- cell activation. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CD28.

[55157] The function of CD28 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM94.1. Cd59 antigen p18-20 (antigen identified by monoclonal antibodies 16.3a5, ej16, ej30, el32 and g344) (CD59, Accession NP_000602.1) is another GAM7957 target gene, herein designated TARGET GENE. CD59 BINDING

SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CD59, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CD59 BINDING SITE, designated SEQ ID:6036, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55158] Another function of GAM7957 is therefore inhibition of Cd59 antigen p18-20 (antigen identified by monoclonal antibodies 16.3a5, ej16, ej30, el32 and g344) (CD59, Accession NP_000602.1), a gene which restricts lysis of human erythrocytes and leukocytes by homologous complement. and therefore may be associated with Cd59 deficiency (hemolytic anemia and thrombosis). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Cd59 deficiency (hemolytic anemia and thrombosis), and of other diseases and clinical conditions associated with CD59.

[55159] The function of CD59 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM401.1.Cd68 antigen (CD68, Accession

NP_001242.1) is another GAM7957 target gene, herein designated TARGET GENE. CD68 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CD68, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CD68 BINDING SITE, designated SEQ ID:17185, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55160] Another function of GAM7957 is therefore inhibition of Cd68 antigen (CD68, Accession NP_001242.1), a gene which is highly expressed by human monocytes and tissue macrophages. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CD68.

[55161] The function of CD68 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM347.1. Cd84 antigen (leukocyte antigen) (CD84, Accession NP_003865.1) is another GAM7957 target gene, herein designated TARGET GENE. CD84 BINDING SITE is a target binding site found in the 3' untranslated region of

mRNA encoded by CD84, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CD84 BINDING SITE, designated SEQ ID:3814, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55162] Another function of GAM7957 is therefore inhibition of Cd84 antigen (leukocyte antigen) (CD84, Accession NP_003865.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CD84.

[55163] Congenital dyserythropoietic anemia, type i (CDAN1, Accession XP_085300.3) is another GAM7957 target gene, herein designated TARGET GENE. CDAN1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CDAN1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CDAN1 BINDING SITE, designated SEQ ID:6264, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55164] Another function of GAM7957 is therefore inhibition of Congenital dyserythropoietic anemia, type i (CDAN1, Accession XP_085300.3) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CDAN1.

[55165] Cdc42 effector protein (rho gtpase binding) 3 (CDC42EP3, Accession NP_006440.2) is another GAM7957 target gene, herein designated TARGET GENE. CDC42EP3 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by CDC42EP3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CDC42EP3 BINDING SITE, designated SEQ ID:8291, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55166] Another function of GAM7957 is therefore inhibition of Cdc42 effector protein (rho gtpase binding) 3 (CDC42EP3, Accession NP_006440.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CDC42EP3.

[55167] Cell division cycle associated 4 (CDCA4, Accession

NP_060425.2) is another GAM7957 target gene, herein designated TARGET GENE. CDCA4 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CDCA4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CDCA4 BINDING SITE, designated SEQ ID:6066, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55168] Another function of GAM7957 is therefore inhibition of Cell division cycle associated 4 (CDCA4, Accession NP_060425.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CDCA4.

[55169] Cadherin 6, type 2, k-cadherin (fetal kidney) (CDH6, Accession NP_004923.1) is another GAM7957 target gene, herein designated TARGET GENE. CDH6 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by CDH6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CDH6 BINDING SITE,

designated SEQ ID:19638, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

- [55170] Another function of GAM7957 is therefore inhibition of Cadherin 6, type 2, k-cadherin (fetal kidney) (CDH6, Accession NP_004923.1), a gene which is a calcium dependent cell adhesion protein. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CDH6.
- [55171] The function of CDH6 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM282.2.CDT1 (Accession NP_112190.1) is another GAM7957 target gene, herein designated TARGET GENE. CDT1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CDT1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CDT1 BINDING SITE, designated SEQ ID:5446, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

- [55172] Another function of GAM7957 is therefore inhibition of

CDT1 (Accession NP_112190.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CDT1.

[55173] Carcinoembryonic antigen-related cell adhesion molecule 5 (CEACAM5, Accession NP_004354.1) is another GAM7957 target gene, herein designated TARGET GENE. CEACAM5 BINDING SITE1 and CEACAM5 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by CEACAM5, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CEACAM5 BINDING SITE1 and CEACAM5 BINDING SITE2, designated SEQ ID:3562 and SEQ ID:14555 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55174] Another function of GAM7957 is therefore inhibition of Carcinoembryonic antigen-related cell adhesion molecule 5 (CEACAM5, Accession NP_004354.1), a gene which is a complex immunoreactive glycoprotein and therefore may be associated with Liver metastasis. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Liver metastasis, and of other diseases and clinical

conditions associated with CEACAM5.

[55175] The function of CEACAM5 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM347.1.Centaurin, gamma 1 (CENTG1, Accession NP_055585.1) is another GAM7957 target gene, herein designated TARGET GENE. CENTG1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CENTG1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CENTG1 BINDING SITE, designated SEQ ID:15422, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55176] Another function of GAM7957 is therefore inhibition of Centaurin, gamma 1 (CENTG1, Accession NP_055585.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CENTG1.

[55177] Ceramide kinase (CERK, Accession NP_073603.2) is another GAM7957 target gene, herein designated TARGET GENE. CERK BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by CERK, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CERK BINDING SITE, designated SEQ ID:1617, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55178] Another function of GAM7957 is therefore inhibition of Ceramide kinase (CERK, Accession NP_073603.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CERK.

[55179] CG012 (Accession XP_096710.1) is another GAM7957 target gene, herein designated TARGET GENE. CG012 BINDING SITE1 through CG012 BINDING SITE4 are target binding sites found in untranslated regions of mRNA encoded by CG012, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CG012 BINDING SITE1 through CG012 BINDING SITE4, designated SEQ ID:5067, SEQ ID:15105, SEQ ID:11098 and SEQ ID:10655 respectively, to the nucleotide sequence of GAM7957 RNA, herein des-

ignated GAM RNA, also designated SEQ ID:297.

[55180] Another function of GAM7957 is therefore inhibition of CG012 (Accession XP_096710.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CG012.

[55181] CGI-119 (Accession NP_057140.1) is another GAM7957 target gene, herein designated TARGET GENE. CGI-119 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CGI-119, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CGI-119 BINDING SITE, designated SEQ ID:7927, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55182] Another function of GAM7957 is therefore inhibition of CGI-119 (Accession NP_057140.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CGI-119.

[55183] CGI-57 (Accession NP_056495.2) is another GAM7957 target gene, herein designated TARGET GENE. CGI-57 BINDING SITE is a target binding site found in the 5' un-

translated region of mRNA encoded by CGI-57, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CGI-57 BINDING SITE, designated SEQ ID:4207, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55184] Another function of GAM7957 is therefore inhibition of CGI-57 (Accession NP_056495.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CGI-57.

[55185] Chrna7 (cholinergic receptor, nicotinic, alpha polypeptide 7, exons 5-10) and fam7a (family with sequence similarity 7a, exons a-e) fusion (CHRFAM7A, Accession NP_683709.1) is another GAM7957 target gene, herein designated TARGET GENE. CHRFAM7A BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by CHRFAM7A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CHRFAM7A BINDING SITE, designated SEQ ID:19583, to the nucleotide sequence of GAM7957 RNA, herein design-

nated GAM RNA, also designated SEQ ID:297.

[55186] Another function of GAM7957 is therefore inhibition of Chrna7 (cholinergic receptor, nicotinic, alpha polypeptide 7, exons 5–10) and fam7a (family with sequence similarity 7a, exons a–e) fusion (CHRFAM7A, Accession NP_683709.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CHRFAM7A.

[55187] CKLiK (Accession NP_705718.1) is another GAM7957 target gene, herein designated TARGET GENE. CKLiK BINDING SITE1 and CKLiK BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by CKLiK, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CKLiK BINDING SITE1 and CKLiK BINDING SITE2, designated SEQ ID:1797 and SEQ ID:15089 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55188] Another function of GAM7957 is therefore inhibition of CKLiK (Accession NP_705718.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of

diseases and clinical conditions associated with CKLIK.

[55189] Chloride channel 7 (CLCN7, Accession NP_001278.1) is another GAM7957 target gene, herein designated TARGET GENE. CLCN7 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CLCN7, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CLCN7 BINDING SITE, designated SEQ ID:11937, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55190] Another function of GAM7957 is therefore inhibition of Chloride channel 7 (CLCN7, Accession NP_001278.1), a gene which is voltage-gated chloride channel. and therefore is associated with Osteopetrosis. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Osteopetrosis., and of other diseases and clinical conditions associated with CLCN7.

[55191] The function of CLCN7 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM483.1.Claudin 15 (CLDN15, Accession

NP_055158.1) is another GAM7957 target gene, herein designated TARGET GENE. CLDN15 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by CLDN15, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CLDN15 BINDING SITE, designated SEQ ID:4226, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55192] Another function of GAM7957 is therefore inhibition of Claudin 15 (CLDN15, Accession NP_055158.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CLDN15.

[55193] Claudin 15 (CLDN15, Accession NP_612438.1) is another GAM7957 target gene, herein designated TARGET GENE. CLDN15 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by CLDN15, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CLDN15 BINDING SITE, design-

nated SEQ ID:4226, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55194] Another function of GAM7957 is therefore inhibition of Claudin 15 (CLDN15, Accession NP_612438.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CLDN15.

[55195] Claudin 19 (CLDN19, Accession NP_683763.1) is another GAM7957 target gene, herein designated TARGET GENE. CLDN19 BINDING SITE1 and CLDN19 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by CLDN19, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CLDN19 BINDING SITE1 and CLDN19 BINDING SITE2, designated SEQ ID:10568 and SEQ ID:5830 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55196] Another function of GAM7957 is therefore inhibition of Claudin 19 (CLDN19, Accession NP_683763.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention

and treatment of diseases and clinical conditions associated with CLDN19.

[55197] Ceroid–lipofuscinosis, neuronal 8 (epilepsy, progressive with mental retardation) (CLN8, Accession NP_061764.2) is another GAM7957 target gene, herein designated TARGET GENE. CLN8 BINDING SITE1 and CLN8 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by CLN8, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CLN8 BINDING SITE1 and CLN8 BINDING SITE2, designated SEQ ID:18690 and SEQ ID:8497 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55198] Another function of GAM7957 is therefore inhibition of Ceroid–lipofuscinosis, neuronal 8 (epilepsy, progressive with mental retardation) (CLN8, Accession NP_061764.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CLN8.

[55199] Claspin homolog (xenopus laevis) (CLSPN, Accession NP_071394.2) is another GAM7957 target gene, herein

designated TARGET GENE. CLSPN BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by CLSPN, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CLSPN BINDING SITE, designated SEQ ID:15905, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55200] Another function of GAM7957 is therefore inhibition of Claspin homolog (*xenopus laevis*) (CLSPN, Accession NP_071394.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CLSPN.

[55201] Cyclin m1 (CNNM1, Accession NP_065081.1) is another GAM7957 target gene, herein designated TARGET GENE. CNNM1 BINDING SITE1 and CNNM1 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by CNNM1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CNNM1 BINDING SITE1 and CNNM1 BINDING SITE2, designated SEQ ID:5830 and

SEQ ID:10439 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55202] Another function of GAM7957 is therefore inhibition of Cyclin m1 (CNNM1, Accession NP_065081.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CNNM1.

[55203] COE2 (Accession XP_034639.1) is another GAM7957 target gene, herein designated TARGET GENE. COE2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by COE2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of COE2 BINDING SITE, designated SEQ ID:13624, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55204] Another function of GAM7957 is therefore inhibition of COE2 (Accession XP_034639.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with COE2.

[55205] Cop9 constitutive photomorphogenic homolog subunit 7b

(arabidopsis) (COPS7B, Accession NP_073567.1) is another GAM7957 target gene, herein designated TARGET GENE. COPS7B BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by COPS7B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of COPS7B BINDING SITE, designated SEQ ID:5797, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55206] Another function of GAM7957 is therefore inhibition of Cop9 constitutive photomorphogenic homolog subunit 7b (arabidopsis) (COPS7B, Accession NP_073567.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with COPS7B.

[55207] Carboxypeptidase m (CPM, Accession NP_001865.1) is another GAM7957 target gene, herein designated TARGET GENE. CPM BINDING SITE1 and CPM BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by CPM, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of

the nucleotide sequences of CPM BINDING SITE1 and CPM BINDING SITE2, designated SEQ ID:5015 and SEQ ID:14439 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55208] Another function of GAM7957 is therefore inhibition of Carboxypeptidase m (CPM, Accession NP_001865.1), a gene which specifically removes COOH- terminal basic amino acids (arginine or lysine). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CPM.

[55209] The function of CPM and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM72.1.CPR2 (Accession NP_112162.1) is another GAM7957 target gene, herein designated TARGET GENE. CPR2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CPR2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CPR2 BINDING SITE, designated SEQ ID:3265, to the nucleotide sequence of GAM7957

RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55210] Another function of GAM7957 is therefore inhibition of CPR2 (Accession NP_112162.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CPR2.

[55211] Carnitine palmitoyltransferase ii (CPT2, Accession NP_000089.1) is another GAM7957 target gene, herein designated TARGET GENE. CPT2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CPT2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CPT2 BINDING SITE, designated SEQ ID:15223, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55212] Another function of GAM7957 is therefore inhibition of Carnitine palmitoyltransferase ii (CPT2, Accession NP_000089.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CPT2.

[55213] CRACC (Accession NP_067004.3) is another GAM7957

target gene, herein designated TARGET GENE. CRACC BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CRACC, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CRACC BINDING SITE, designated SEQ ID:9770, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55214] Another function of GAM7957 is therefore inhibition of CRACC (Accession NP_067004.3), a gene which may participate in adhesion reactions between T lymphocytes and accessory cells. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CRACC.

[55215] The function of CRACC and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM347.1.Crm, cramped-like (drosophila) (CRAMP1L, Accession XP_034570.4) is another GAM7957 target gene, herein designated TARGET GENE. CRAMP1L BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CRAMP1L, corresponding to a

target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CRAMP1L BINDING SITE, designated SEQ ID:7133, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55216] Another function of GAM7957 is therefore inhibition of Crm, cramped-like (drosophila) (CRAMP1L, Accession XP_034570.4) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CRAMP1L.

[55217] Camp responsive element binding protein 1 (CREB1, Accession NP_604391.1) is another GAM7957 target gene, herein designated TARGET GENE. CREB1 BINDING SITE1 and CREB1 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by CREB1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CREB1 BINDING SITE1 and CREB1 BINDING SITE2, designated SEQ ID:5925 and SEQ ID:14278 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ

ID:297.

[55218] Another function of GAM7957 is therefore inhibition of Camp responsive element binding protein 1 (CREB1, Accession NP_604391.1), a gene which regulates expression of cAMP- inducible genes. and therefore may be associated with Malignancy. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Malignancy, and of other diseases and clinical conditions associated with CREB1.

[55219] The function of CREB1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM260.1.Camp responsive element binding protein 1 (CREB1, Accession NP_004370.1) is another GAM7957 target gene, herein designated TARGET GENE. CREB1 BINDING SITE1 and CREB1 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by CREB1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CREB1 BINDING SITE1 and CREB1 BINDING SITE2, designated SEQ ID:5925 and SEQ ID:14278 respectively, to the nucleotide

sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55220] Another function of GAM7957 is therefore inhibition of Camp responsive element binding protein 1 (CREB1, Accession NP_004370.1), a gene which regulates expression of cAMP- inducible genes. and therefore may be associated with Malignancy. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Malignancy, and of other diseases and clinical conditions associated with CREB1.

[55221] The function of CREB1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM260.1.Carnitine o-octanoyltransferase (CROT, Accession NP_066974.2) is another GAM7957 target gene, herein designated TARGET GENE. CROT BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CROT, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CROT BINDING SITE, designated SEQ ID:13250, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also design-

nated SEQ ID:297.

[55222] Another function of GAM7957 is therefore inhibition of Carnitine o-octanoyltransferase (CROT, Accession NP_066974.2), a gene which CROT plays a crucial role in the beta-oxidation of branched-chain fatty acids including pristanic acid. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CROT.

[55223] The function of CROT and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM72.1. CRTAM (Accession NP_062550.1) is another GAM7957 target gene, herein designated TARGET GENE. CRTAM BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CRTAM, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CRTAM BINDING SITE, designated SEQ ID:2833, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55224] Another function of GAM7957 is therefore inhibition of CRTAM (Accession NP_062550.1). Accordingly, utilities of

GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CRTAM.

[55225] Cryptochrome 2 (photolyase-like) (CRY2, Accession NP_066940.1) is another GAM7957 target gene, herein designated TARGET GENE. CRY2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CRY2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CRY2 BINDING SITE, designated SEQ ID:17056, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55226] Another function of GAM7957 is therefore inhibition of Cryptochrome 2 (photolyase-like) (CRY2, Accession NP_066940.1), a gene which has a role in circadian photoreception in mammals. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CRY2.

[55227] The function of CRY2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM347.1.Crystallin, zeta (quinone reductase)-like 1

(CRYZL1, Accession NP_660354.1) is another GAM7957 target gene, herein designated TARGET GENE. CRYZL1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CRYZL1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CRYZL1 BINDING SITE, designated SEQ ID:5251, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55228] Another function of GAM7957 is therefore inhibition of Crystallin, zeta (quinone reductase)-like 1 (CRYZL1, Accession NP_660354.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CRYZL1.

[55229] Cysteine sulfinic acid decarboxylase (CSAD, Accession NP_057073.2) is another GAM7957 target gene, herein designated TARGET GENE. CSAD BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CSAD, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the

nucleotide sequences of CSAD BINDING SITE, designated SEQ ID:6679, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55230] Another function of GAM7957 is therefore inhibition of Cysteine sulfinic acid decarboxylase (CSAD, Accession NP_057073.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CSAD.

[55231] CTMP (Accession NP_444283.1) is another GAM7957 target gene, herein designated TARGET GENE. CTMP BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CTMP, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CTMP BINDING SITE, designated SEQ ID:16622, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55232] Another function of GAM7957 is therefore inhibition of CTMP (Accession NP_444283.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CTMP.

[55233] CTMP (Accession NP_789823.1) is another GAM7957 target gene, herein designated TARGET GENE. CTMP BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CTMP, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CTMP BINDING SITE, designated SEQ ID:16622, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55234] Another function of GAM7957 is therefore inhibition of CTMP (Accession NP_789823.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CTMP.

[55235] Cathepsin s (CTSS, Accession NP_004070.3) is another GAM7957 target gene, herein designated TARGET GENE. CTSS BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CTSS, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CTSS BINDING SITE, designated SEQ ID:1951, to the nucleotide sequence of GAM7957 RNA, herein designated

GAM RNA, also designated SEQ ID:297.

[55236] Another function of GAM7957 is therefore inhibition of Cathepsin s (CTSS, Accession NP_004070.3), a gene which is a lysosomal cysteine (thiol) protease that cleaves elastin. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CTSS.

[55237] The function of CTSS and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM72.1.Cubilin (intrinsic factor-cobalamin receptor) (CUBN, Accession NP_001072.1) is another GAM7957 target gene, herein designated TARGET GENE. CUBN BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CUBN, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CUBN BINDING SITE, designated SEQ ID:13063, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55238] Another function of GAM7957 is therefore inhibition of Cubilin (intrinsic factor-cobalamin receptor) (CUBN, Ac-

cession NP_001072.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CUBN.

[55239] CX40.1 (Accession NP_699199.1) is another GAM7957 target gene, herein designated TARGET GENE. CX40.1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CX40.1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CX40.1 BINDING SITE, designated SEQ ID:4730, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55240] Another function of GAM7957 is therefore inhibition of CX40.1 (Accession NP_699199.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CX40.1.

[55241] Chromosome x open reading frame 12 (CXorf12, Accession NP_003483.1) is another GAM7957 target gene, herein designated TARGET GENE. CXorf12 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by CXorf12, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or

BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CXorf12 BINDING SITE, designated SEQ ID:9618, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55242] Another function of GAM7957 is therefore inhibition of Chromosome x open reading frame 12 (CXorf12, Accession NP_003483.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CXorf12.

[55243] CXYorf1 (Accession XP_088704.2) is another GAM7957 target gene, herein designated TARGET GENE. CXYorf1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CXYorf1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CXYorf1 BINDING SITE, designated SEQ ID:8398, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55244] Another function of GAM7957 is therefore inhibition of CXYorf1 (Accession XP_088704.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment

of diseases and clinical conditions associated with CXY-orf1.

[55245] Cytochrome b-561 (CYB561, Accession NP_001906.2) is another GAM7957 target gene, herein designated TARGET GENE. CYB561 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CYB561, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CYB561 BINDING SITE, designated SEQ ID:7117, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55246] Another function of GAM7957 is therefore inhibition of Cytochrome b-561 (CYB561, Accession NP_001906.2), a gene which is a secretory vesicle-specific electron transport protein. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CYB561.

[55247] The function of CYB561 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM65.2.CYCS (Accession NP_061820.1) is another

GAM7957 target gene, herein designated TARGET GENE. CYCS BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CYCS, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CYCS BINDING SITE, designated SEQ ID:18947, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55248] Another function of GAM7957 is therefore inhibition of CYCS (Accession NP_061820.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CYCS.

[55249] Chromosome y open reading frame 14 (CYorf14, Accession NP_061012.1) is another GAM7957 target gene, herein designated TARGET GENE. CYorf14 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CYorf14, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CYorf14 BINDING SITE, designated SEQ ID:14752, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA,

also designated SEQ ID:297.

[55250] Another function of GAM7957 is therefore inhibition of Chromosome y open reading frame 14 (CYorf14, Accession NP_061012.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CYorf14.

[55251] Cytochrome p450, subfamily ivf, polypeptide 3 (leukotriene b4 omega hydroxylase) (CYP4F3, Accession NP_000887.1) is another GAM7957 target gene, herein designated TARGET GENE. CYP4F3 BINDING SITE1 and CYP4F3 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by CYP4F3, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CYP4F3 BINDING SITE1 and CYP4F3 BINDING SITE2, designated SEQ ID:18962 and SEQ ID:16247 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55252] Another function of GAM7957 is therefore inhibition of Cytochrome p450, subfamily ivf, polypeptide 3 (leukotriene b4 omega hydroxylase) (CYP4F3, Accession NP_000887.1), a gene which converts leukotriene B4 into

the less active 20- hydroxy- leukotriene B4. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CYP4F3.

[55253] The function of CYP4F3 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM67.1.D21S2056E (Accession NP_003674.1) is another GAM7957 target gene, herein designated TARGET GENE. D21S2056E BINDING SITE1 and D21S2056E BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by D21S2056E, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of D21S2056E BINDING SITE1 and D21S2056E BINDING SITE2, designated SEQ ID:13060 and SEQ ID:15089 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55254] Another function of GAM7957 is therefore inhibition of D21S2056E (Accession NP_003674.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

D21S2056E.

[55255] Dual adaptor of phosphotyrosine and 3-phosphoinositides (DAPP1, Accession NP_055210.1) is another GAM7957 target gene, herein designated TARGET GENE. DAPP1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DAPP1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DAPP1 BINDING SITE, designated SEQ ID:2773, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55256] Another function of GAM7957 is therefore inhibition of Dual adaptor of phosphotyrosine and 3-phosphoinositides (DAPP1, Accession NP_055210.1), a gene which regulates the ras- cyclic amp pathway. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DAPP1.

[55257] The function of DAPP1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM72.1.Deleted in bladder cancer chromosome re-

gion candidate 1 (DBCCR1, Accession NP_055433.1) is another GAM7957 target gene, herein designated TARGET GENE. DBCCR1 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by DBCCR1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DBCCR1 BINDING SITE, designated SEQ ID:2272, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55258] Another function of GAM7957 is therefore inhibition of Deleted in bladder cancer chromosome region candidate 1 (DBCCR1, Accession NP_055433.1), a gene which might be a target for hypermethylation . and therefore may be associated with Transitional cell carcinoma of the bladder. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Transitional cell carcinoma of the bladder, and of other diseases and clinical conditions associated with DBCCR1.

[55259] The function of DBCCR1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM401.1.Dihydrolipoamide branched chain transacylase (e2 component of branched chain keto acid dehydrogenase complex; maple syrup urine disease) (DBT, Accession NP_001909.1) is another GAM7957 target gene, herein designated TARGET GENE. DBT BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DBT, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DBT BINDING SITE, designated SEQ ID:9770, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55260] Another function of GAM7957 is therefore inhibition of Dihydrolipoamide branched chain transacylase (e2 component of branched chain keto acid dehydrogenase complex; maple syrup urine disease) (DBT, Accession NP_001909.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DBT.

[55261] Dna cross-link repair 1c (ps02 homolog, *s. cerevisiae*) (DCLRE1C, Accession NP_071932.1) is another GAM7957 target gene, herein designated TARGET GENE. DCLRE1C

BINDING SITE1 and DCLRE1C BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by DCLRE1C, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DCLRE1C BINDING SITE1 and DCLRE1C BINDING SITE2, designated SEQ ID:9270 and SEQ ID:9533 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55262] Another function of GAM7957 is therefore inhibition of Dna cross-link repair 1c (ps02 homolog, *s. cerevisiae*) (DCLRE1C, Accession NP_071932.1), a gene which intervenes in V(D)J recombination/DNA repair. and therefore may be associated with Severe combined immunodeficiency with sensitivity to ionizing radiation . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Severe combined immunodeficiency with sensitivity to ionizing radiation ., and of other diseases and clinical conditions associated with DCLRE1C.

[55263] The function of DCLRE1C and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM72.1.Dolichyl–diphosphooligosaccharide–protein glycosyltransferase (DDOST, Accession NP_005207.2) is another GAM7957 target gene, herein designated TARGET GENE. DDOST BINDING SITE1 and DDOST BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by DDOST, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DDOST BINDING SITE1 and DDOST BINDING SITE2, designated SEQ ID:15593 and SEQ ID:17654 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55264] Another function of GAM7957 is therefore inhibition of Dolichyl–diphosphooligosaccharide–protein glycosyltransferase (DDOST, Accession NP_005207.2), a gene which transfers high– mannose oligosaccharides to nascent polypeptides. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DDOST.

[55265] The function of DDOST and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM347.2.Dead/h (asp-glu-ala-asp/his) box polypeptide 34 (DDX34, Accession NP_055496.1) is another GAM7957 target gene, herein designated TARGET GENE. DDX34 BINDING SITE1 and DDX34 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by DDX34, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DDX34 BINDING SITE1 and DDX34 BINDING SITE2, designated SEQ ID:7047 and SEQ ID:2125 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55266] Another function of GAM7957 is therefore inhibition of Dead/h (asp-glu-ala-asp/his) box polypeptide 34 (DDX34, Accession NP_055496.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DDX34.

[55267] DDX51 (Accession NP_778236.1) is another GAM7957 target gene, herein designated TARGET GENE. DDX51 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DDX51, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DDX51 BINDING SITE, designated SEQ ID:17424, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55268] Another function of GAM7957 is therefore inhibition of DDX51 (Accession NP_778236.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DDX51.

[55269] Degenerative spermatocyte homolog, lipid desaturase (drosophila) (DEGS, Accession NP_659004.1) is another GAM7957 target gene, herein designated TARGET GENE. DEGS BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by DEGS, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DEGS BINDING SITE, designated SEQ ID:2834, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55270] Another function of GAM7957 is therefore inhibition of Degenerative spermatocyte homolog, lipid desaturase

(drosophila) (DEGS, Accession NP_659004.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DEGS.

[55271] Degenerative spermatocyte homolog, lipid desaturase (drosophila) (DEGS, Accession NP_003667.1) is another GAM7957 target gene, herein designated TARGET GENE. DEGS BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by DEGS, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DEGS BINDING SITE, designated SEQ ID:2834, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55272] Another function of GAM7957 is therefore inhibition of Degenerative spermatocyte homolog, lipid desaturase (drosophila) (DEGS, Accession NP_003667.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DEGS.

[55273] D component of complement (adipsin) (DF, Accession

NP_001919.1) is another GAM7957 target gene, herein designated TARGET GENE. DF BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DF, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DF BINDING SITE, designated SEQ ID:8534, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55274] Another function of GAM7957 is therefore inhibition of D component of complement (adipsin) (DF, Accession NP_001919.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DF.

[55275] Dna fragmentation factor, 45kda, alpha polypeptide (DFFA, Accession NP_004392.1) is another GAM7957 target gene, herein designated TARGET GENE. DFFA BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DFFA, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DFFA BINDING SITE, designated SEQ ID:19036, to the nucleotide se-

quence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55276] Another function of GAM7957 is therefore inhibition of Dna fragmentation factor, 45kda, alpha polypeptide (DFFA, Accession NP_004392.1), a gene which is the substrate for caspase- 3 and triggers DNA fragmentation during apoptosis. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DFFA.

[55277] The function of DFFA and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM347.2.Diacylglycerol kinase, iota (DGKI, Accession NP_004708.1) is another GAM7957 target gene, herein designated TARGET GENE. DGKI BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by DGKI, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DGKI BINDING SITE, designated SEQ ID:13155, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55278] Another function of GAM7957 is therefore inhibition of Diacylglycerol kinase, *iota* (DGKI, Accession NP_004708.1), a gene which regulates the intracellular concentration of the second messenger diacylglycerol (DAG). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DGKI.

[55279] The function of DGKI and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM207.2.DIS3 (Accession NP_055768.2) is another GAM7957 target gene, herein designated TARGET GENE. DIS3 BINDING SITE1 and DIS3 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by DIS3, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DIS3 BINDING SITE1 and DIS3 BINDING SITE2, designated SEQ ID:17399 and SEQ ID:15204 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55280] Another function of GAM7957 is therefore inhibition of

DIS3 (Accession NP_055768.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DIS3.

[55281] DJ122O8.2 (Accession NP_065199.1) is another GAM7957 target gene, herein designated TARGET GENE. DJ122O8.2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DJ122O8.2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DJ122O8.2 BINDING SITE, designated SEQ ID:3814, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55282] Another function of GAM7957 is therefore inhibition of DJ122O8.2 (Accession NP_065199.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DJ122O8.2.

[55283] DKFZp313G1735 (Accession XP_087728.2) is another GAM7957 target gene, herein designated TARGET GENE. DKFZp313G1735 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZp313G1735, corresponding to a target binding site

such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp313G1735 BINDING SITE, designated SEQ ID:9281, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55284] Another function of GAM7957 is therefore inhibition of DKFZp313G1735 (Accession XP_087728.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp313G1735.

[55285] DKFZp313N0621 (Accession NP_776187.1) is another GAM7957 target gene, herein designated TARGET GENE. DKFZp313N0621 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZp313N0621, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp313N0621 BINDING SITE, designated SEQ ID:7349, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55286] Another function of GAM7957 is therefore inhibition of

DKFZp313N0621 (Accession NP_776187.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp313N0621.

[55287] DKFZP434A0131 (Accession NP_061864.1) is another GAM7957 target gene, herein designated TARGET GENE. DKFZP434A0131 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZP434A0131, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP434A0131 BINDING SITE, designated SEQ ID:8751, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55288] Another function of GAM7957 is therefore inhibition of DKFZP434A0131 (Accession NP_061864.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZP434A0131.

[55289] DKFZP434B0335 (Accession XP_166485.3) is another GAM7957 target gene, herein designated TARGET GENE. DKFZP434B0335 BINDING SITE1 and DKFZP434B0335

BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by DKFZP434B0335, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP434B0335 BINDING SITE1 and DKFZP434B0335 BINDING SITE2, designated SEQ ID:4428 and SEQ ID:7885 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55290] Another function of GAM7957 is therefore inhibition of DKFZP434B0335 (Accession XP_166485.3) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZP434B0335.

[55291] DKFZP434B103 (Accession NP_056459.1) is another GAM7957 target gene, herein designated TARGET GENE. DKFZP434B103 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by DKFZP434B103, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP434B103 BINDING SITE,

designated SEQ ID:11706, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55292] Another function of GAM7957 is therefore inhibition of DKFZP434B103 (Accession NP_056459.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZP434B103.

[55293] DKFZP434B168 (Accession NP_056249.1) is another GAM7957 target gene, herein designated TARGET GENE. DKFZP434B168 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZP434B168, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP434B168 BINDING SITE, designated SEQ ID:2483, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55294] Another function of GAM7957 is therefore inhibition of DKFZP434B168 (Accession NP_056249.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated

with DKFZP434B168.

[55295] DKFZP434C171 (Accession NP_056436.1) is another GAM7957 target gene, herein designated TARGET GENE. DKFZP434C171 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZP434C171, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP434C171 BINDING SITE, designated SEQ ID:17129, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55296] Another function of GAM7957 is therefore inhibition of DKFZP434C171 (Accession NP_056436.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZP434C171.

[55297] DKFZp434E0519 (Accession NP_115623.1) is another GAM7957 target gene, herein designated TARGET GENE. DKFZp434E0519 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZp434E0519, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III

of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp434E0519 BINDING SITE, designated SEQ ID:6416, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55298] Another function of GAM7957 is therefore inhibition of DKFZp434E0519 (Accession NP_115623.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp434E0519.

[55299] DKFZp434E2220 (Accession NP_060082.1) is another GAM7957 target gene, herein designated TARGET GENE. DKFZp434E2220 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by DKFZp434E2220, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp434E2220 BINDING SITE, designated SEQ ID:14786, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55300] Another function of GAM7957 is therefore inhibition of DKFZp434E2220 (Accession NP_060082.1) . Accordingly,

utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp434E2220.

[55301] DKFZP434F091 (Accession NP_056268.1) is another GAM7957 target gene, herein designated TARGET GENE. DKFZP434F091 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZP434F091, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP434F091 BINDING SITE, designated SEQ ID:744, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55302] Another function of GAM7957 is therefore inhibition of DKFZP434F091 (Accession NP_056268.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZP434F091.

[55303] DKFZp434H247 (Accession XP_290829.1) is another GAM7957 target gene, herein designated TARGET GENE. DKFZp434H247 BINDING SITE1 and DKFZp434H247 BINDING SITE2 are target binding sites found in untranslated

regions of mRNA encoded by DKFZp434H247, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp434H247 BINDING SITE1 and DKFZp434H247 BINDING SITE2, designated SEQ ID:17399 and SEQ ID:4428 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55304] Another function of GAM7957 is therefore inhibition of DKFZp434H247 (Accession XP_290829.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp434H247.

[55305] DKFZP434I1735 (Accession XP_113763.3) is another GAM7957 target gene, herein designated TARGET GENE. DKFZP434I1735 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZP434I1735, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP434I1735 BINDING SITE, designated SEQ ID:3132, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also design-

nated SEQ ID:297.

[55306] Another function of GAM7957 is therefore inhibition of DKFZP434I1735 (Accession XP_113763.3) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZP434I1735.

[55307] DKFZP434L187 (Accession XP_044070.6) is another GAM7957 target gene, herein designated TARGET GENE. DKFZP434L187 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZP434L187, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP434L187 BINDING SITE, designated SEQ ID:17403, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55308] Another function of GAM7957 is therefore inhibition of DKFZP434L187 (Accession XP_044070.6) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZP434L187.

[55309] DKFZP434P0111 (Accession XP_041116.1) is another

GAM7957 target gene, herein designated TARGET GENE. DKFZP434P0111 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZP434P0111, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP434P0111 BINDING SITE, designated SEQ ID:7178, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55310] Another function of GAM7957 is therefore inhibition of DKFZP434P0111 (Accession XP_041116.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZP434P0111.

[55311] DKFZP434P211 (Accession NP_055364.1) is another GAM7957 target gene, herein designated TARGET GENE. DKFZP434P211 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZP434P211, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP434P211 BINDING SITE,

designated SEQ ID:6448, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55312] Another function of GAM7957 is therefore inhibition of DKFZP434P211 (Accession NP_055364.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZP434P211.

[55313] DKFZp547C176 (Accession XP_040799.2) is another GAM7957 target gene, herein designated TARGET GENE. DKFZp547C176 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZp547C176, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp547C176 BINDING SITE, designated SEQ ID:5830, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55314] Another function of GAM7957 is therefore inhibition of DKFZp547C176 (Accession XP_040799.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated

with DKFZp547C176.

[55315] DKFZp547G183 (Accession NP_061175.1) is another GAM7957 target gene, herein designated TARGET GENE. DKFZp547G183 BINDING SITE1 and DKFZp547G183 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by DKFZp547G183, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp547G183 BINDING SITE1 and DKFZp547G183 BINDING SITE2, designated SEQ ID:9762 and SEQ ID:18018 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55316] Another function of GAM7957 is therefore inhibition of DKFZp547G183 (Accession NP_061175.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp547G183.

[55317] DKFZp547I094 (Accession NP_115531.1) is another GAM7957 target gene, herein designated TARGET GENE. DKFZp547I094 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZp547I094, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp547I094 BINDING SITE, designated SEQ ID:11012, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55318] Another function of GAM7957 is therefore inhibition of DKFZp547I094 (Accession NP_115531.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp547I094.

[55319] DKFZP564I122 (Accession XP_032397.1) is another GAM7957 target gene, herein designated TARGET GENE. DKFZP564I122 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZP564I122, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP564I122 BINDING SITE, designated SEQ ID:8377, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55320] Another function of GAM7957 is therefore inhibition of

DKFZP564I122 (Accession XP_032397.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZP564I122.

[55321] DKFZP564J0863 (Accession NP_056274.1) is another GAM7957 target gene, herein designated TARGET GENE. DKFZP564J0863 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZP564J0863, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP564J0863 BINDING SITE, designated SEQ ID:14509, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55322] Another function of GAM7957 is therefore inhibition of DKFZP564J0863 (Accession NP_056274.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZP564J0863.

[55323] DKFZp564K142 (Accession NP_115497.2) is another GAM7957 target gene, herein designated TARGET GENE. DKFZp564K142 BINDING SITE is a target binding site

found in the 3' untranslated region of mRNA encoded by DKFZp564K142, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp564K142 BINDING SITE, designated SEQ ID:1903, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55324] Another function of GAM7957 is therefore inhibition of DKFZp564K142 (Accession NP_115497.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp564K142.

[55325] DKFZP564M182 (Accession XP_085525.3) is another GAM7957 target gene, herein designated TARGET GENE. DKFZP564M182 BINDING SITE1 and DKFZP564M182 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by DKFZP564M182, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP564M182 BINDING SITE1 and DKFZP564M182 BINDING SITE2, designated SEQ ID:16630 and SEQ ID:7401

respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55326] Another function of GAM7957 is therefore inhibition of DKFZP564M182 (Accession XP_085525.3) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZP564M182.

[55327] DKFZP564O0423 (Accession XP_166254.2) is another GAM7957 target gene, herein designated TARGET GENE. DKFZP564O0423 BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by DKFZP564O0423, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP564O0423 BINDING SITE, designated SEQ ID:2876, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55328] Another function of GAM7957 is therefore inhibition of DKFZP564O0423 (Accession XP_166254.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated

with DKFZP564O0423.

[55329] DKFZp566H0824 (Accession NP_060005.1) is another GAM7957 target gene, herein designated TARGET GENE. DKFZp566H0824 BINDING SITE1 and DKFZp566H0824 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by DKFZp566H0824, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp566H0824 BINDING SITE1 and DKFZp566H0824 BINDING SITE2, designated SEQ ID:8019 and SEQ ID:7863 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55330] Another function of GAM7957 is therefore inhibition of DKFZp566H0824 (Accession NP_060005.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp566H0824.

[55331] DKFZP566J2046 (Accession NP_112485.1) is another GAM7957 target gene, herein designated TARGET GENE. DKFZP566J2046 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by

DKFZP566J2046, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP566J2046 BINDING SITE, designated SEQ ID:1200, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55332] Another function of GAM7957 is therefore inhibition of DKFZP566J2046 (Accession NP_112485.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZP566J2046.

[55333] DKFZP566K0524 (Accession NP_056420.1) is another GAM7957 target gene, herein designated TARGET GENE. DKFZP566K0524 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by DKFZP566K0524, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP566K0524 BINDING SITE, designated SEQ ID:12521, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55334] Another function of GAM7957 is therefore inhibition of DKFZP566K0524 (Accession NP_056420.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZP566K0524.

[55335] DKFZp586C0721 (Accession XP_098416.1) is another GAM7957 target gene, herein designated TARGET GENE. DKFZp586C0721 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZp586C0721, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp586C0721 BINDING SITE, designated SEQ ID:19501, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55336] Another function of GAM7957 is therefore inhibition of DKFZp586C0721 (Accession XP_098416.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp586C0721.

[55337] DKFZP586C1324 (Accession XP_045876.1) is another GAM7957 target gene, herein designated TARGET GENE.

DKFZP586C1324 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZP586C1324, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP586C1324 BINDING SITE, designated SEQ ID:6014, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55338] Another function of GAM7957 is therefore inhibition of DKFZP586C1324 (Accession XP_045876.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZP586C1324.

[55339] DKFZP586M1120 (Accession NP_112584.1) is another GAM7957 target gene, herein designated TARGET GENE. DKFZP586M1120 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZP586M1120, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP586M1120 BINDING SITE, designated SEQ ID:5614, to the nucleotide sequence of

GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55340] Another function of GAM7957 is therefore inhibition of DKFZP586M1120 (Accession NP_112584.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZP586M1120.

[55341] DKFZp727A071 (Accession NP_689481.1) is another GAM7957 target gene, herein designated TARGET GENE. DKFZp727A071 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by DKFZp727A071, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp727A071 BINDING SITE, designated SEQ ID:9974, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55342] Another function of GAM7957 is therefore inhibition of DKFZp727A071 (Accession NP_689481.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp727A071.

[55343] DKFZP727C091 (Accession XP_038689.1) is another GAM7957 target gene, herein designated TARGET GENE. DKFZP727C091 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by DKFZP727C091, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP727C091 BINDING SITE, designated SEQ ID:7653, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55344] Another function of GAM7957 is therefore inhibition of DKFZP727C091 (Accession XP_038689.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZP727C091.

[55345] DKFZp727G131 (Accession NP_659802.1) is another GAM7957 target gene, herein designated TARGET GENE. DKFZp727G131 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZp727G131, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the

nucleotide sequences of DKFZp727G131 BINDING SITE, designated SEQ ID:1693, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55346] Another function of GAM7957 is therefore inhibition of DKFZp727G131 (Accession NP_659802.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp727G131.

[55347] DKFZp761A052 (Accession XP_054098.4) is another GAM7957 target gene, herein designated TARGET GENE. DKFZp761A052 BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by DKFZp761A052, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp761A052 BINDING SITE, designated SEQ ID:5957, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55348] Another function of GAM7957 is therefore inhibition of DKFZp761A052 (Accession XP_054098.4) . Accordingly, utilities of GAM7957 include diagnosis, prevention and

treatment of diseases and clinical conditions associated with DKFZp761A052.

[55349] DKFZp761G0122 (Accession NP_689874.1) is another GAM7957 target gene, herein designated TARGET GENE. DKFZp761G0122 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZp761G0122, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp761G0122 BINDING SITE, designated SEQ ID:920, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55350] Another function of GAM7957 is therefore inhibition of DKFZp761G0122 (Accession NP_689874.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp761G0122.

[55351] DKFZp761G2113 (Accession XP_046017.3) is another GAM7957 target gene, herein designated TARGET GENE. DKFZp761G2113 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZp761G2113, corresponding to a target binding site

such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp761G2113 BINDING SITE, designated SEQ ID:10014, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55352] Another function of GAM7957 is therefore inhibition of DKFZp761G2113 (Accession XP_046017.3) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp761G2113.

[55353] DKFZp761H0421 (Accession NP_775102.1) is another GAM7957 target gene, herein designated TARGET GENE. DKFZp761H0421 BINDING SITE1 and DKFZp761H0421 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by DKFZp761H0421, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp761H0421 BINDING SITE1 and DKFZp761H0421 BINDING SITE2, designated SEQ ID:13155 and SEQ ID:15340 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also design-

nated SEQ ID:297.

[55354] Another function of GAM7957 is therefore inhibition of DKFZp761H0421 (Accession NP_775102.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp761H0421.

[55355] DKFZp761I2123 (Accession XP_166582.2) is another GAM7957 target gene, herein designated TARGET GENE. DKFZp761I2123 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZp761I2123, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp761I2123 BINDING SITE, designated SEQ ID:17403, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55356] Another function of GAM7957 is therefore inhibition of DKFZp761I2123 (Accession XP_166582.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp761I2123.

[55357] DKFZp761J139 (Accession NP_115656.1) is another

GAM7957 target gene, herein designated TARGET GENE. DKFZp761J139 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by DKFZp761J139, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp761J139 BINDING SITE, designated SEQ ID:9330, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55358] Another function of GAM7957 is therefore inhibition of DKFZp761J139 (Accession NP_115656.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp761J139.

[55359] DKFZp761L1417 (Accession NP_690877.1) is another GAM7957 target gene, herein designated TARGET GENE. DKFZp761L1417 BINDING SITE1 and DKFZp761L1417 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by DKFZp761L1417, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

DKFZp761L1417 BINDING SITE1 and DKFZp761L1417 BINDING SITE2, designated SEQ ID:6861 and SEQ ID:11920 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55360] Another function of GAM7957 is therefore inhibition of DKFZp761L1417 (Accession NP_690877.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp761L1417.

[55361] DKFZp761L1518 (Accession XP_294685.2) is another GAM7957 target gene, herein designated TARGET GENE. DKFZp761L1518 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by DKFZp761L1518, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp761L1518 BINDING SITE, designated SEQ ID:19710, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55362] Another function of GAM7957 is therefore inhibition of DKFZp761L1518 (Accession XP_294685.2) . Accordingly,

utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp761L1518.

[55363] DKFZp762I137 (Accession NP_689624.1) is another GAM7957 target gene, herein designated TARGET GENE. DKFZp762I137 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZp762I137, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp762I137 BINDING SITE, designated SEQ ID:2921, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55364] Another function of GAM7957 is therefore inhibition of DKFZp762I137 (Accession NP_689624.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp762I137.

[55365] DKFZp762N1910 (Accession XP_290525.1) is another GAM7957 target gene, herein designated TARGET GENE. DKFZp762N1910 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by

DKFZp762N1910, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp762N1910 BINDING SITE, designated SEQ ID:8890, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55366] Another function of GAM7957 is therefore inhibition of DKFZp762N1910 (Accession XP_290525.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp762N1910.

[55367] Dmc1 dosage suppressor of mck1 homolog, meiosis-specific homologous recombination (yeast) (DMC1, Accession NP_008999.2) is another GAM7957 target gene, herein designated TARGET GENE. DMC1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DMC1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DMC1 BINDING SITE, designated SEQ ID:6684, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ

ID:297.

[55368] Another function of GAM7957 is therefore inhibition of Dmc1 dosage suppressor of mck1 homolog, meiosis-specific homologous recombination (yeast) (DMC1, Accession NP_008999.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DMC1.

[55369] DNAM-1 (Accession NP_006557.1) is another GAM7957 target gene, herein designated TARGET GENE. DNAM-1 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by DNAM-1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DNAM-1 BINDING SITE, designated SEQ ID:14329, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55370] Another function of GAM7957 is therefore inhibition of DNAM-1 (Accession NP_006557.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DNAM-1.

[55371] Deoxyribonuclease ii, lysosomal (DNASE2, Accession

NP_001366.1) is another GAM7957 target gene, herein designated TARGET GENE. DNASE2 BINDING SITE1 and DNASE2 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by DNASE2, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DNASE2 BINDING SITE1 and DNASE2 BINDING SITE2, designated SEQ ID:17444 and SEQ ID:12684 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55372] Another function of GAM7957 is therefore inhibition of Deoxyribonuclease ii, lysosomal (DNASE2, Accession NP_001366.1), a gene which has a possible role in apoptosis. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DNASE2.

[55373] The function of DNASE2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM72.1.Dynein, cytoplasmic, light polypeptide 2a (DNCL2A, Accession NP_808853.1) is another GAM7957 target gene, herein designated TARGET GENE. DNCL2A

BINDING SITE is a target binding site found in the 5` untranslated region of multiple transcripts of mRNA encoded by DNCL2A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DNCL2A BINDING SITE, designated SEQ ID:9496, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55374] Another function of GAM7957 is therefore inhibition of Dynein, cytoplasmic, light polypeptide 2a (DNCL2A, Accession NP_808853.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DNCL2A.

[55375] Dynein, cytoplasmic, light polypeptide 2a (DNCL2A, Accession NP_054902.1) is another GAM7957 target gene, herein designated TARGET GENE. DNCL2A BINDING SITE is a target binding site found in the 5` untranslated region of multiple transcripts of mRNA encoded by DNCL2A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DNCL2A BINDING SITE, designated SEQ ID:9496, to the

nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55376] Another function of GAM7957 is therefore inhibition of Dynein, cytoplasmic, light polypeptide 2a (DNCL2A, Accession NP_054902.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DNCL2A.

[55377] Dynein, cytoplasmic, light polypeptide 2b (DNCL2B, Accession NP_570967.1) is another GAM7957 target gene, herein designated TARGET GENE. DNCL2B BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by DNCL2B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DNCL2B BINDING SITE, designated SEQ ID:908, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55378] Another function of GAM7957 is therefore inhibition of Dynein, cytoplasmic, light polypeptide 2b (DNCL2B, Accession NP_570967.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DNCL2B.

[55379] Dipeptidylpeptidase 9 (DPP9, Accession NP_631898.1) is another GAM7957 target gene, herein designated TARGET GENE. DPP9 BINDING SITE1 and DPP9 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by DPP9, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DPP9 BINDING SITE1 and DPP9 BINDING SITE2, designated SEQ ID:5830 and SEQ ID:9761 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55380] Another function of GAM7957 is therefore inhibition of Dipeptidylpeptidase 9 (DPP9, Accession NP_631898.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DPP9.

[55381] DRF1 (Accession NP_079380.1) is another GAM7957 target gene, herein designated TARGET GENE. DRF1 BINDING SITE1 and DRF1 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by DRF1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING

SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DRF1 BINDING SITE1 and DRF1 BINDING SITE2, designated SEQ ID:11050 and SEQ ID:19029 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55382] Another function of GAM7957 is therefore inhibition of DRF1 (Accession NP_079380.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DRF1.

[55383] DRIM (Accession NP_055318.1) is another GAM7957 target gene, herein designated TARGET GENE. DRIM BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DRIM, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DRIM BINDING SITE, designated SEQ ID:18872, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55384] Another function of GAM7957 is therefore inhibition of DRIM (Accession NP_055318.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of

diseases and clinical conditions associated with DRIM.

[55385] Desmocollin 1 (DSC1, Accession NP_077739.1) is another GAM7957 target gene, herein designated TARGET GENE. DSC1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by DSC1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DSC1 BINDING SITE, designated SEQ ID:1568, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55386] Another function of GAM7957 is therefore inhibition of Desmocollin 1 (DSC1, Accession NP_077739.1), a gene which is a component of intercellular desmosome junctions. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DSC1.

[55387] The function of DSC1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM195.1. Desmocollin 1 (DSC1, Accession NP_004939.1) is another GAM7957 target gene, herein

designated TARGET GENE. DSC1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by DSC1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DSC1 BINDING SITE, designated SEQ ID:1568, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55388] Another function of GAM7957 is therefore inhibition of Desmocollin 1 (DSC1, Accession NP_004939.1), a gene which is a component of intercellular desmosome junctions. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DSC1.

[55389] The function of DSC1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM195.1. Desmocollin 2 (DSC2, Accession NP_004940.1) is another GAM7957 target gene, herein designated TARGET GENE. DSC2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by DSC2, corresponding

to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DSC2 BINDING SITE, designated SEQ ID:19615, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55390] Another function of GAM7957 is therefore inhibition of Desmocollin 2 (DSC2, Accession NP_004940.1), a gene which is a component of intercellular desmosome junctions. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DSC2.

[55391] The function of DSC2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM401.1. Down syndrome critical region gene 6 (DSCR6, Accession NP_061835.1) is another GAM7957 target gene, herein designated TARGET GENE. DSCR6 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DSCR6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

DSCR6 BINDING SITE, designated SEQ ID:13664, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55392] Another function of GAM7957 is therefore inhibition of Down syndrome critical region gene 6 (DSCR6, Accession NP_061835.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DSCR6.

[55393] Dystrobrevin, beta (DTNB, Accession NP_068707.1) is another GAM7957 target gene, herein designated TARGET GENE. DTNB BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by DTNB, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DTNB BINDING SITE, designated SEQ ID:2938, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55394] Another function of GAM7957 is therefore inhibition of Dystrobrevin, beta (DTNB, Accession NP_068707.1), a gene which is a part of a dystrophin-associated protein complex . and therefore may be associated with Limb-

girdle muscular dystrophy. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Limb- girdle muscular dystrophy, and of other diseases and clinical conditions associated with DTNB.

[55395] The function of DTNB and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM100.1.Dystrobrevin, beta (DTNB, Accession NP_149160.1) is another GAM7957 target gene, herein designated TARGET GENE. DTNB BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by DTNB, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DTNB BINDING SITE, designated SEQ ID:2938, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55396] Another function of GAM7957 is therefore inhibition of Dystrobrevin, beta (DTNB, Accession NP_149160.1), a gene which is a part of a dystrophin- associated protein complex . and therefore may be associated with Limb- girdle muscular dystrophy. Accordingly, utilities of

GAM7957 include diagnosis, prevention and treatment of Limb- girdle muscular dystrophy, and of other diseases and clinical conditions associated with DTNB.

[55397] The function of DTNB and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM100.1.Dishevelled, dsh homolog 3 (drosophila) (DVL3, Accession NP_004414.2) is another GAM7957 target gene, herein designated TARGET GENE. DVL3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DVL3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DVL3 BINDING SITE, designated SEQ ID:7466, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55398] Another function of GAM7957 is therefore inhibition of Dishevelled, dsh homolog 3 (drosophila) (DVL3, Accession NP_004414.2), a gene which regulates cell proliferation. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DVL3.

[55399] The function of DVL3 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM47.1. Endothelial differentiation, sphingolipid g-protein-coupled receptor, 3 (EDG3, Accession NP_005217.1) is another GAM7957 target gene, herein designated TARGET GENE. EDG3 BINDING SITE1 and EDG3 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by EDG3, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of EDG3 BINDING SITE1 and EDG3 BINDING SITE2, designated SEQ ID:19288 and SEQ ID:6041 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55400] Another function of GAM7957 is therefore inhibition of Endothelial differentiation, sphingolipid g-protein-coupled receptor, 3 (EDG3, Accession NP_005217.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with EDG3.

[55401] Egf-like-domain, multiple 4 (EGFL4, Accession

XP_290821.1) is another GAM7957 target gene, herein designated TARGET GENE. EGFL4 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by EGFL4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of EGFL4 BINDING SITE, designated SEQ ID:15055, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55402] Another function of GAM7957 is therefore inhibition of Egf-like-domain, multiple 4 (EGFL4, Accession XP_290821.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with EGFL4.

[55403] Egf-like-domain, multiple 5 (EGFL5, Accession XP_098838.1) is another GAM7957 target gene, herein designated TARGET GENE. EGFL5 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by EGFL5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of EGFL5 BINDING SITE, designated

SEQ ID:4534, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55404] Another function of GAM7957 is therefore inhibition of Egf-like-domain, multiple 5 (EGFL5, Accession XP_098838.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with EGFL5.

[55405] Eh-domain containing 1 (EHD1, Accession NP_006786.2) is another GAM7957 target gene, herein designated TARGET GENE. EHD1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by EHD1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of EHD1 BINDING SITE, designated SEQ ID:15638, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55406] Another function of GAM7957 is therefore inhibition of Eh-domain containing 1 (EHD1, Accession NP_006786.2), a gene which may be involved in ligand-initiated endocytosis. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical condi-

tions associated with EHD1.

[55407] The function of EHD1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM65.1. Eukaryotic translation initiation factor 1a (EIF1A, Accession NP_001403.1) is another GAM7957 target gene, herein designated TARGET GENE. EIF1A BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by EIF1A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of EIF1A BINDING SITE, designated SEQ ID:13049, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55408] Another function of GAM7957 is therefore inhibition of Eukaryotic translation initiation factor 1a (EIF1A, Accession NP_001403.1), a gene which seems to be required for maximal rate of protein biosynthesis. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with EIF1A.

[55409] The function of EIF1A and its association with various diseases and clinical conditions, has been established by

previous studies, as described hereinabove with reference to GAM1345.1. Eukaryotic translation initiation factor 2 alpha kinase 4 (EIF2AK4, Accession XP_031612.6) is another GAM7957 target gene, herein designated TARGET GENE. EIF2AK4 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by EIF2AK4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig. 8. Table 4 illustrates the complementarity of the nucleotide sequences of EIF2AK4 BINDING SITE, designated SEQ ID:11505, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55410] Another function of GAM7957 is therefore inhibition of Eukaryotic translation initiation factor 2 alpha kinase 4 (EIF2AK4, Accession XP_031612.6). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with EIF2AK4.

[55411] Eukaryotic translation initiation factor 3, subunit 2 beta, 36kda (EIF3S2, Accession NP_003748.1) is another GAM7957 target gene, herein designated TARGET GENE. EIF3S2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by EIF3S2, cor-

responding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of EIF3S2 BINDING SITE, designated SEQ ID:17403, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55412] Another function of GAM7957 is therefore inhibition of Eukaryotic translation initiation factor 3, subunit 2 beta, 36kda (EIF3S2, Accession NP_003748.1), a gene which binds to the 40s ribosome and promotes the binding of methionyl- trnai and mrna. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with EIF3S2.

[55413] The function of EIF3S2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM207.2.Elav (embryonic lethal, abnormal vision, drosophila)-like 2 (hu antigen b) (ELAVL2, Accession NP_004423.1) is another GAM7957 target gene, herein designated TARGET GENE. ELAVL2 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by ELAVL2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING

SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ELAVL2 BINDING SITE, designated SEQ ID:6187, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55414] Another function of GAM7957 is therefore inhibition of Elav (embryonic lethal, abnormal vision, drosophila)-like 2 (hu antigen b) (ELAVL2, Accession NP_004423.1), a gene which binds rna. seems to recognize a gaaa motif. can bind to its own 3' untranslated region (3'utr), the c- fos 3'utr and the id 3'utr. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ELAVL2.

[55415] The function of ELAVL2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM439.1.E1a binding protein p300 (EP300, Accession NP_001420.1) is another GAM7957 target gene, herein designated TARGET GENE. EP300 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by EP300, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the

nucleotide sequences of EP300 BINDING SITE, designated SEQ ID:14306, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55416] Another function of GAM7957 is therefore inhibition of E1a binding protein p300 (EP300, Accession NP_001420.1), a gene which may have a function in cell cycle regulation. and therefore may be associated with Colorectal cancer. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Colorectal cancer, and of other diseases and clinical conditions associated with EP300.

[55417] The function of EP300 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM473.1.Ephb1 (EPHB1, Accession NP_004432.1) is another GAM7957 target gene, herein designated TARGET GENE. EPHB1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by EPHB1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of EPHB1 BINDING SITE, designated SEQ ID:3606,

to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55418] Another function of GAM7957 is therefore inhibition of Ephb1 (EPHB1, Accession NP_004432.1), a gene which receptor for members of the ephrin- b family. binds to ephrin- b1, - b2 and - b3. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with EPHB1.

[55419] The function of EPHB1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM96.1.ERAP140 (Accession XP_059748.2) is another GAM7957 target gene, herein designated TARGET GENE. ERAP140 BINDING SITE1 and ERAP140 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by ERAP140, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ERAP140 BINDING SITE1 and ERAP140 BINDING SITE2, designated SEQ ID:15089 and SEQ ID:12831 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55420] Another function of GAM7957 is therefore inhibition of ERAP140 (Accession XP_059748.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ERAP140.

[55421] ET (Accession NP_077287.1) is another GAM7957 target gene, herein designated TARGET GENE. ET BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ET, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ET BINDING SITE, designated SEQ ID:11097, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55422] Another function of GAM7957 is therefore inhibition of ET (Accession NP_077287.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ET.

[55423] EXO70 (Accession NP_056034.1) is another GAM7957 target gene, herein designated TARGET GENE. EXO70 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by EXO70, corresponding

to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of EXO70 BINDING SITE, designated SEQ ID:6447, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55424] Another function of GAM7957 is therefore inhibition of EXO70 (Accession NP_056034.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with EXO70.

[55425] Coagulation factor ii (thrombin) receptor-like 3 (F2RL3, Accession NP_003941.1) is another GAM7957 target gene, herein designated TARGET GENE. F2RL3 BINDING SITE1 through F2RL3 BINDING SITE4 are target binding sites found in untranslated regions of mRNA encoded by F2RL3, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of F2RL3 BINDING SITE1 through F2RL3 BINDING SITE4, designated SEQ ID:13066, SEQ ID:10569, SEQ ID:4424 and SEQ ID:18740 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55426] Another function of GAM7957 is therefore inhibition of Coagulation factor ii (thrombin) receptor-like 3 (F2RL3, Accession NP_003941.1), a gene which Protease- activated receptor 4; G protein- coupled receptor that increases phosphoinositide hydrolysis. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with F2RL3.

[55427] The function of F2RL3 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM72.1. Fatty acid desaturase 1 (FADS1, Accession NP_037534.2) is another GAM7957 target gene, herein designated TARGET GENE. FADS1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FADS1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FADS1 BINDING SITE, designated SEQ ID:10611, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55428] Another function of GAM7957 is therefore inhibition of Fatty acid desaturase 1 (FADS1, Accession NP_037534.2) .

Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FADS1.

[55429] Fatty acid desaturase 2 (FADS2, Accession NP_004256.1) is another GAM7957 target gene, herein designated TARGET GENE. FADS2 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FADS2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FADS2 BINDING SITE, designated SEQ ID:7605, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55430] Another function of GAM7957 is therefore inhibition of Fatty acid desaturase 2 (FADS2, Accession NP_004256.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FADS2.

[55431] Fanconi anemia, complementation group c (FANCC, Accession NP_000127.1) is another GAM7957 target gene, herein designated TARGET GENE. FANCC BINDING SITE is a target binding site found in the 3' untranslated region of

mRNA encoded by FANCC, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FANCC BINDING SITE, designated SEQ ID:16815, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55432] Another function of GAM7957 is therefore inhibition of Fanconi anemia, complementation group c (FANCC, Accession NP_000127.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FANCC.

[55433] FBLP-1 (Accession NP_060026.1) is another GAM7957 target gene, herein designated TARGET GENE. FBLP-1 BINDING SITE1 and FBLP-1 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by FBLP-1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FBLP-1 BINDING SITE1 and FBLP-1 BINDING SITE2, designated SEQ ID:15697 and SEQ ID:13065 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated

GAM RNA, also designated SEQ ID:297.

[55434] Another function of GAM7957 is therefore inhibition of FBLP-1 (Accession NP_060026.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FBLP-1.

[55435] FBLP-1 (Accession XP_290943.1) is another GAM7957 target gene, herein designated TARGET GENE. FBLP-1 BINDING SITE1 and FBLP-1 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by FBLP-1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FBLP-1 BINDING SITE1 and FBLP-1 BINDING SITE2, designated SEQ ID:15697 and SEQ ID:5802 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55436] Another function of GAM7957 is therefore inhibition of FBLP-1 (Accession XP_290943.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FBLP-1.

[55437] F-box only protein 26 (FBXO26, Accession NP_079183.4) is another GAM7957 target gene, herein designated TAR-

GET GENE. FBXO26 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by FBXO26, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FBXO26 BINDING SITE, designated SEQ ID:6268, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55438] Another function of GAM7957 is therefore inhibition of F-box only protein 26 (FBXO26, Accession NP_079183.4). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FBXO26.

[55439] F-box only protein 26 (FBXO26, Accession NP_680474.1) is another GAM7957 target gene, herein designated TARGET GENE. FBXO26 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by FBXO26, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FBXO26 BINDING SITE, designated SEQ ID:6268, to the nucleotide sequence

of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55440] Another function of GAM7957 is therefore inhibition of F-box only protein 26 (FBXO26, Accession NP_680474.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FBXO26.

[55441] F-box only protein 27 (FBXO27, Accession XP_059045.1) is another GAM7957 target gene, herein designated TARGET GENE. FBXO27 BINDING SITE1 and FBXO27 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by FBXO27, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FBXO27 BINDING SITE1 and FBXO27 BINDING SITE2, designated SEQ ID:15089 and SEQ ID:19101 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55442] Another function of GAM7957 is therefore inhibition of F-box only protein 27 (FBXO27, Accession XP_059045.1) . Accordingly, utilities of GAM7957 include diagnosis, pre-

vention and treatment of diseases and clinical conditions associated with FBXO27.

[55443] F-box only protein 27 (FBXO27, Accession NP_849142.1) is another GAM7957 target gene, herein designated TARGET GENE. FBXO27 BINDING SITE1 and FBXO27 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by FBXO27, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FBXO27 BINDING SITE1 and FBXO27 BINDING SITE2, designated SEQ ID:15089 and SEQ ID:19101 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55444] Another function of GAM7957 is therefore inhibition of F-box only protein 27 (FBXO27, Accession NP_849142.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FBXO27.

[55445] F-box only protein 6 (FBXO6, Accession NP_060908.1) is another GAM7957 target gene, herein designated TARGET GENE. FBXO6 BINDING SITE is a target binding site found

in the 3' untranslated region of mRNA encoded by FBXO6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FBXO6 BINDING SITE, designated SEQ ID:14305, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55446] Another function of GAM7957 is therefore inhibition of F-box only protein 6 (FBXO6, Accession NP_060908.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FBXO6.

[55447] F-box only protein 9 (FBXO9, Accession NP_258441.1) is another GAM7957 target gene, herein designated TARGET GENE. FBXO9 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by FBXO9, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FBXO9 BINDING SITE, designated SEQ ID:7864, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55448] Another function of GAM7957 is therefore inhibition of F-box only protein 9 (FBXO9, Accession NP_258441.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FBXO9.

[55449] Fc fragment of iga, receptor for (FCAR, Accession NP_579814.1) is another GAM7957 target gene, herein designated TARGET GENE. FCAR BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by FCAR, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FCAR BINDING SITE, designated SEQ ID:9833, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55450] Another function of GAM7957 is therefore inhibition of Fc fragment of iga, receptor for (FCAR, Accession NP_579814.1), a gene which binds to the fc region of immunoglobulins alpha and mediates several functions including cytokine production. and therefore may be associated with Iga nephropathy. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of

Iga nephropathy., and of other diseases and clinical conditions associated with FCAR.

[55451] The function of FCAR and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM136.1.Fc fragment of iga, receptor for (FCAR, Accession NP_579813.1) is another GAM7957 target gene, herein designated TARGET GENE. FCAR BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by FCAR, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FCAR BINDING SITE, designated SEQ ID:9833, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55452] Another function of GAM7957 is therefore inhibition of Fc fragment of iga, receptor for (FCAR, Accession NP_579813.1), a gene which binds to the fc region of immunoglobulins alpha and mediates several functions including cytokine production. and therefore may be associated with Iga nephropathy. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of

Iga nephropathy., and of other diseases and clinical conditions associated with FCAR.

[55453] The function of FCAR and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM136.1.Fukuyama type congenital muscular dystrophy (fukutin) (FCMD, Accession NP_006722.1) is another GAM7957 target gene, herein designated TARGET GENE. FCMD BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FCMD, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FCMD BINDING SITE, designated SEQ ID:1356, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55454] Another function of GAM7957 is therefore inhibition of Fukuyama type congenital muscular dystrophy (fukutin) (FCMD, Accession NP_006722.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FCMD.

[55455] Ficolin (collagen/fibrinogen domain containing lectin) 2 (hucolin) (FCN2, Accession NP_056653.1) is another

GAM7957 target gene, herein designated TARGET GENE. FCN2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by FCN2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FCN2 BINDING SITE, designated SEQ ID:12186, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55456] Another function of GAM7957 is therefore inhibition of Ficolin (collagen/fibrinogen domain containing lectin) 2 (hucolin) (FCN2, Accession NP_056653.1), a gene which is involved in phagocytosis of pathogens. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FCN2.

[55457] The function of FCN2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM223.1. Ficolin (collagen/fibrinogen domain containing lectin) 2 (hucolin) (FCN2, Accession NP_056654.1) is another GAM7957 target gene, herein designated TAR-

GET GENE. FCN2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by FCN2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FCN2 BINDING SITE, designated SEQ ID:12186, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55458] Another function of GAM7957 is therefore inhibition of Ficolin (collagen/fibrinogen domain containing lectin) 2 (hucolin) (FCN2, Accession NP_056654.1), a gene which is involved in phagocytosis of pathogens. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FCN2.

[55459] The function of FCN2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM223.1. Fibroblast growth factor 2 (basic) (FGF2, Accession NP_001997.3) is another GAM7957 target gene, herein designated TARGET GENE. FGF2 BINDING SITE is a target binding site found in the 3' untranslated region of

mRNA encoded by FGF2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FGF2 BINDING SITE, designated SEQ ID:15312, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55460] Another function of GAM7957 is therefore inhibition of Fibroblast growth factor 2 (basic) (FGF2, Accession NP_001997.3), a gene which the Basic fibroblast growth factor 2; is mitogenic, angiogenic, and neurotrophic factor. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FGF2.

[55461] The function of FGF2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM36.1. Fibroblast growth factor receptor 1 (fms-related tyrosine kinase 2, pfeiffer syndrome) (FGFR1, Accession NP_075595.1) is another GAM7957 target gene, herein designated TARGET GENE. FGFR1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by FGFR1, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FGFR1 BINDING SITE, designated SEQ ID:16118, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55462] Another function of GAM7957 is therefore inhibition of Fibroblast growth factor receptor 1 (fms-related tyrosine kinase 2, pfeiffer syndrome) (FGFR1, Accession NP_075595.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FGFR1.

[55463] Fibroblast growth factor receptor 1 (fms-related tyrosine kinase 2, pfeiffer syndrome) (FGFR1, Accession NP_075596.1) is another GAM7957 target gene, herein designated TARGET GENE. FGFR1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by FGFR1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FGFR1 BINDING SITE, designated SEQ ID:16118, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA,

also designated SEQ ID:297.

[55464] Another function of GAM7957 is therefore inhibition of Fibroblast growth factor receptor 1 (fms-related tyrosine kinase 2, pfeiffer syndrome) (FGFR1, Accession NP_075596.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FGFR1.

[55465] Fibroblast growth factor receptor 2 (bacteria-expressed kinase, keratinocyte growth factor receptor, craniofacial dysostosis 1, crouzon syndrome, pfeiffer syndrome, jackson-weiss syndrome) (FGFR2, Accession NP_075263.1) is another GAM7957 target gene, herein designated TARGET GENE. FGFR2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by FGFR2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FGFR2 BINDING SITE, designated SEQ ID:5528, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55466] Another function of GAM7957 is therefore inhibition of Fibroblast growth factor receptor 2 (bacteria-expressed ki-

nase, keratinocyte growth factor receptor, craniofacial dysostosis 1, crouzon syndrome, pfeiffer syndrome, jackson-weiss syndrome) (FGFR2, Accession NP_075263.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FGFR2.

[55467] Fibroblast growth factor receptor 2 (bacteria-expressed kinase, keratinocyte growth factor receptor, craniofacial dysostosis 1, crouzon syndrome, pfeiffer syndrome, jackson-weiss syndrome) (FGFR2, Accession NP_075262.1) is another GAM7957 target gene, herein designated TARGET GENE. FGFR2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by FGFR2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FGFR2 BINDING SITE, designated SEQ ID:5528, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55468] Another function of GAM7957 is therefore inhibition of Fibroblast growth factor receptor 2 (bacteria-expressed kinase, keratinocyte growth factor receptor, craniofacial

dysostosis 1, crouzon syndrome, pfeiffer syndrome, jackson–weiss syndrome) (FGFR2, Accession NP_075262.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FGFR2.

[55469] Fibroblast growth factor receptor–like 1 (FGFRL1, Accession NP_068742.1) is another GAM7957 target gene, herein designated TARGET GENE. FGFRL1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FGFRL1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FGFRL1 BINDING SITE, designated SEQ ID:19614, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55470] Another function of GAM7957 is therefore inhibition of Fibroblast growth factor receptor–like 1 (FGFRL1, Accession NP_068742.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FGFRL1.

[55471] Fk506 binding protein 14, 22 kda (FKBP14, Accession NP_060416.1) is another GAM7957 target gene, herein

designated TARGET GENE. FKBP14 BINDING SITE1 and FKBP14 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FKBP14, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FKBP14 BINDING SITE1 and FKBP14 BINDING SITE2, designated SEQ ID:19054 and SEQ ID:6269 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55472] Another function of GAM7957 is therefore inhibition of Fk506 binding protein 14, 22 kda (FKBP14, Accession NP_060416.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FKBP14.

[55473] FKSG17 (Accession NP_114420.1) is another GAM7957 target gene, herein designated TARGET GENE. FKSG17 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FKSG17, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FKSG17 BINDING SITE, designated SEQ ID:9322, to the nu-

cleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55474] Another function of GAM7957 is therefore inhibition of FKSG17 (Accession NP_114420.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FKSG17.

[55475] FLJ00060 (Accession XP_028154.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ00060 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ00060, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ00060 BINDING SITE, designated SEQ ID:11462, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55476] Another function of GAM7957 is therefore inhibition of FLJ00060 (Accession XP_028154.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ00060.

[55477] FLJ00225 (Accession XP_084552.3) is another GAM7957 target gene, herein designated TARGET GENE. FLJ00225

BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ00225, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ00225 BINDING SITE, designated SEQ ID:8941, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55478] Another function of GAM7957 is therefore inhibition of FLJ00225 (Accession XP_084552.3) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ00225.

[55479] FLJ10058 (Accession NP_060455.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ10058 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ10058, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ10058 BINDING SITE, designated SEQ ID:6015, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55480] Another function of GAM7957 is therefore inhibition of FLJ10058 (Accession NP_060455.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ10058.

[55481] FLJ10120 (Accession NP_060471.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ10120 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ10120, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ10120 BINDING SITE, designated SEQ ID:5141, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55482] Another function of GAM7957 is therefore inhibition of FLJ10120 (Accession NP_060471.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ10120.

[55483] FLJ10139 (Accession NP_060475.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ10139 BINDING SITE is a target binding site found in the 3' un-

translated region of mRNA encoded by FLJ10139, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ10139 BINDING SITE, designated SEQ ID:17277, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55484] Another function of GAM7957 is therefore inhibition of FLJ10139 (Accession NP_060475.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ10139.

[55485] FLJ10244 (Accession NP_060507.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ10244 BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by FLJ10244, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ10244 BINDING SITE, designated SEQ ID:11741, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55486] Another function of GAM7957 is therefore inhibition of

FLJ10244 (Accession NP_060507.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ10244.

[55487] FLJ10300 (Accession NP_060521.2) is another GAM7957 target gene, herein designated TARGET GENE. FLJ10300 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FLJ10300, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ10300 BINDING SITE, designated SEQ ID:2126, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55488] Another function of GAM7957 is therefore inhibition of FLJ10300 (Accession NP_060521.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ10300.

[55489] FLJ10357 (Accession NP_060541.2) is another GAM7957 target gene, herein designated TARGET GENE. FLJ10357 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FLJ10357, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ10357 BINDING SITE, designated SEQ ID:5754, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55490] Another function of GAM7957 is therefore inhibition of FLJ10357 (Accession NP_060541.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ10357.

[55491] FLJ10460 (Accession NP_060567.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ10460 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ10460, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ10460 BINDING SITE, designated SEQ ID:3325, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55492] Another function of GAM7957 is therefore inhibition of FLJ10460 (Accession NP_060567.1) . Accordingly, utilities

of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ10460.

[55493] FLJ10520 (Accession NP_060594.2) is another GAM7957 target gene, herein designated TARGET GENE. FLJ10520 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ10520, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ10520 BINDING SITE, designated SEQ ID:2838, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55494] Another function of GAM7957 is therefore inhibition of FLJ10520 (Accession NP_060594.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ10520.

[55495] FLJ10534 (Accession NP_060598.2) is another GAM7957 target gene, herein designated TARGET GENE. FLJ10534 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ10534, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ10534 BINDING SITE, designated SEQ ID:6240, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55496] Another function of GAM7957 is therefore inhibition of FLJ10534 (Accession NP_060598.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ10534.

[55497] FLJ10547 (Accession NP_060604.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ10547 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ10547, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ10547 BINDING SITE, designated SEQ ID:18846, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55498] Another function of GAM7957 is therefore inhibition of FLJ10547 (Accession NP_060604.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment

of diseases and clinical conditions associated with FLJ10547.

[55499] FLJ10781 (Accession NP_060685.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ10781 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ10781, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ10781 BINDING SITE, designated SEQ ID:909, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55500] Another function of GAM7957 is therefore inhibition of FLJ10781 (Accession NP_060685.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ10781.

[55501] FLJ10803 (Accession NP_060694.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ10803 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ10803, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of FLJ10803 BINDING SITE, designated SEQ ID:15983, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55502] Another function of GAM7957 is therefore inhibition of FLJ10803 (Accession NP_060694.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ10803.

[55503] FLJ10826 (Accession NP_060703.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ10826 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ10826, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ10826 BINDING SITE, designated SEQ ID:19057, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55504] Another function of GAM7957 is therefore inhibition of FLJ10826 (Accession NP_060703.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

FLJ10826.

[55505] FLJ10932 (Accession NP_060747.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ10932 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ10932, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ10932 BINDING SITE, designated SEQ ID:15224, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55506] Another function of GAM7957 is therefore inhibition of FLJ10932 (Accession NP_060747.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ10932.

[55507] FLJ10936 (Accession NP_060749.2) is another GAM7957 target gene, herein designated TARGET GENE. FLJ10936 BINDING SITE1 and FLJ10936 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ10936, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the

nucleotide sequences of FLJ10936 BINDING SITE1 and FLJ10936 BINDING SITE2, designated SEQ ID:1291 and SEQ ID:16966 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55508] Another function of GAM7957 is therefore inhibition of FLJ10936 (Accession NP_060749.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ10936.

[55509] FLJ11029 (Accession NP_060774.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ11029 BINDING SITE1 through FLJ11029 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by FLJ11029, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ11029 BINDING SITE1 through FLJ11029 BINDING SITE3, designated SEQ ID:18691, SEQ ID:17631 and SEQ ID:8904 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55510] Another function of GAM7957 is therefore inhibition of

FLJ11029 (Accession NP_060774.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ11029.

[55511] FLJ11036 (Accession NP_060776.2) is another GAM7957 target gene, herein designated TARGET GENE. FLJ11036 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ11036, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ11036 BINDING SITE, designated SEQ ID:7218, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55512] Another function of GAM7957 is therefore inhibition of FLJ11036 (Accession NP_060776.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ11036.

[55513] FLJ11042 (Accession NP_060778.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ11042 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ11042, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ11042 BINDING SITE, designated SEQ ID:19379, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55514] Another function of GAM7957 is therefore inhibition of FLJ11042 (Accession NP_060778.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ11042.

[55515] FLJ11106 (Accession NP_060794.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ11106 BINDING SITE1 and FLJ11106 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ11106, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ11106 BINDING SITE1 and FLJ11106 BINDING SITE2, designated SEQ ID:10375 and SEQ ID:4880 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55516] Another function of GAM7957 is therefore inhibition of FLJ11106 (Accession NP_060794.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ11106.

[55517] FLJ11126 (Accession NP_060802.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ11126 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ11126, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ11126 BINDING SITE, designated SEQ ID:11721, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55518] Another function of GAM7957 is therefore inhibition of FLJ11126 (Accession NP_060802.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ11126.

[55519] FLJ11151 (Accession NP_060810.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ11151 BINDING SITE1 and FLJ11151 BINDING SITE2 are target

binding sites found in untranslated regions of mRNA encoded by FLJ11151, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ11151 BINDING SITE1 and FLJ11151 BINDING SITE2, designated SEQ ID:12335 and SEQ ID:3794 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55520] Another function of GAM7957 is therefore inhibition of FLJ11151 (Accession NP_060810.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ11151.

[55521] FLJ11259 (Accession NP_060840.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ11259 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ11259, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ11259 BINDING SITE, designated SEQ ID:18025, to the nucleotide sequence of GAM7957 RNA, herein designated

GAM RNA, also designated SEQ ID:297.

[55522] Another function of GAM7957 is therefore inhibition of FLJ11259 (Accession NP_060840.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ11259.

[55523] FLJ11301 (Accession NP_060855.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ11301 BINDING SITE1 and FLJ11301 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ11301, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ11301 BINDING SITE1 and FLJ11301 BINDING SITE2, designated SEQ ID:1492 and SEQ ID:5229 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55524] Another function of GAM7957 is therefore inhibition of FLJ11301 (Accession NP_060855.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ11301.

[55525] FLJ11370 (Accession NP_079237.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ11370 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ11370, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ11370 BINDING SITE, designated SEQ ID:1492, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55526] Another function of GAM7957 is therefore inhibition of FLJ11370 (Accession NP_079237.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ11370.

[55527] FLJ11577 (Accession NP_079435.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ11577 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ11577, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ11577 BINDING SITE, designated SEQ ID:4977, to the

nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55528] Another function of GAM7957 is therefore inhibition of FLJ11577 (Accession NP_079435.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ11577.

[55529] FLJ11700 (Accession NP_079168.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ11700 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ11700, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ11700 BINDING SITE, designated SEQ ID:8533, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55530] Another function of GAM7957 is therefore inhibition of FLJ11700 (Accession NP_079168.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ11700.

[55531] FLJ11710 (Accession NP_079122.1) is another GAM7957

target gene, herein designated TARGET GENE. FLJ11710 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FLJ11710, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ11710 BINDING SITE, designated SEQ ID:12055, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55532] Another function of GAM7957 is therefore inhibition of FLJ11710 (Accession NP_079122.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ11710.

[55533] FLJ11715 (Accession NP_078840.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ11715 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ11715, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ11715 BINDING SITE, designated SEQ ID:16495, to the nucleotide sequence of GAM7957 RNA, herein designated

GAM RNA, also designated SEQ ID:297.

[55534] Another function of GAM7957 is therefore inhibition of FLJ11715 (Accession NP_078840.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ11715.

[55535] FLJ11722 (Accession NP_079246.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ11722 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ11722, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ11722 BINDING SITE, designated SEQ ID:8840, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55536] Another function of GAM7957 is therefore inhibition of FLJ11722 (Accession NP_079246.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ11722.

[55537] FLJ11800 (Accession NP_079250.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ11800

BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ11800, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ11800 BINDING SITE, designated SEQ ID:10310, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55538] Another function of GAM7957 is therefore inhibition of FLJ11800 (Accession NP_079250.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ11800.

[55539] FLJ11996 (Accession NP_079252.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ11996 BINDING SITE1 and FLJ11996 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ11996, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ11996 BINDING SITE1 and FLJ11996 BINDING SITE2, designated SEQ ID:3322 and SEQ ID:12331 respectively, to the nucleotide sequence of

GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55540] Another function of GAM7957 is therefore inhibition of FLJ11996 (Accession NP_079252.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ11996.

[55541] FLJ12056 (Accession NP_079209.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ12056 BINDING SITE1 and FLJ12056 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ12056, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ12056 BINDING SITE1 and FLJ12056 BINDING SITE2, designated SEQ ID:12398 and SEQ ID:5828 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55542] Another function of GAM7957 is therefore inhibition of FLJ12056 (Accession NP_079209.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

FLJ12056.

[55543] FLJ12078 (Accession NP_079253.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ12078 BINDING SITE1 and FLJ12078 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ12078, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ12078 BINDING SITE1 and FLJ12078 BINDING SITE2, designated SEQ ID:13066 and SEQ ID:8723 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55544] Another function of GAM7957 is therefore inhibition of FLJ12078 (Accession NP_079253.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ12078.

[55545] FLJ12190 (Accession NP_079347.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ12190 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ12190, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ12190 BINDING SITE, designated SEQ ID:10438, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55546] Another function of GAM7957 is therefore inhibition of FLJ12190 (Accession NP_079347.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ12190.

[55547] FLJ12298 (Accession NP_115540.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ12298 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ12298, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ12298 BINDING SITE, designated SEQ ID:6415, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55548] Another function of GAM7957 is therefore inhibition of FLJ12298 (Accession NP_115540.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment

of diseases and clinical conditions associated with FLJ12298.

[55549] FLJ12303 (Accession NP_115541.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ12303 BINDING SITE1 and FLJ12303 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ12303, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ12303 BINDING SITE1 and FLJ12303 BINDING SITE2, designated SEQ ID:16879 and SEQ ID:16943 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55550] Another function of GAM7957 is therefore inhibition of FLJ12303 (Accession NP_115541.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ12303.

[55551] FLJ12331 (Accession NP_079262.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ12331 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ12331, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ12331 BINDING SITE, designated SEQ ID:10982, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55552] Another function of GAM7957 is therefore inhibition of FLJ12331 (Accession NP_079262.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ12331.

[55553] FLJ12448 (Accession NP_075046.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ12448 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ12448, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ12448 BINDING SITE, designated SEQ ID:13668, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55554] Another function of GAM7957 is therefore inhibition of FLJ12448 (Accession NP_075046.1) . Accordingly, utilities

of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ12448.

[55555] FLJ12484 (Accession NP_073604.2) is another GAM7957 target gene, herein designated TARGET GENE. FLJ12484 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ12484, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ12484 BINDING SITE, designated SEQ ID:2963, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55556] Another function of GAM7957 is therefore inhibition of FLJ12484 (Accession NP_073604.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ12484.

[55557] FLJ12586 (Accession NP_078896.2) is another GAM7957 target gene, herein designated TARGET GENE. FLJ12586 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ12586, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ12586 BINDING SITE, designated SEQ ID:1908, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55558] Another function of GAM7957 is therefore inhibition of FLJ12586 (Accession NP_078896.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ12586.

[55559] FLJ12606 (Accession NP_079080.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ12606 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ12606, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ12606 BINDING SITE, designated SEQ ID:5039, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55560] Another function of GAM7957 is therefore inhibition of FLJ12606 (Accession NP_079080.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment

of diseases and clinical conditions associated with FLJ12606.

[55561] FLJ12618 (Accession NP_079160.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ12618 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ12618, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ12618 BINDING SITE, designated SEQ ID:17753, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55562] Another function of GAM7957 is therefore inhibition of FLJ12618 (Accession NP_079160.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ12618.

[55563] FLJ12660 (Accession NP_079428.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ12660 BINDING SITE1 and FLJ12660 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ12660, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III

of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ12660 BINDING SITE1 and FLJ12660 BINDING SITE2, designated SEQ ID:7966 and SEQ ID:8107 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55564] Another function of GAM7957 is therefore inhibition of FLJ12660 (Accession NP_079428.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ12660.

[55565] FLJ12666 (Accession NP_078871.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ12666 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ12666, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ12666 BINDING SITE, designated SEQ ID:19695, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55566] Another function of GAM7957 is therefore inhibition of FLJ12666 (Accession NP_078871.1) . Accordingly, utilities

of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ12666.

[55567] FLJ12671 (Accession NP_112242.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ12671 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ12671, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ12671 BINDING SITE, designated SEQ ID:14567, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55568] Another function of GAM7957 is therefore inhibition of FLJ12671 (Accession NP_112242.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ12671.

[55569] FLJ12687 (Accession NP_079193.2) is another GAM7957 target gene, herein designated TARGET GENE. FLJ12687 BINDING SITE1 and FLJ12687 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ12687, corresponding to target binding sites

such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ12687 BINDING SITE1 and FLJ12687 BINDING SITE2, designated SEQ ID:6150 and SEQ ID:13584 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55570] Another function of GAM7957 is therefore inhibition of FLJ12687 (Accession NP_079193.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ12687.

[55571] FLJ12800 (Accession NP_075054.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ12800 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ12800, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ12800 BINDING SITE, designated SEQ ID:1400, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55572] Another function of GAM7957 is therefore inhibition of

FLJ12800 (Accession NP_075054.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ12800.

[55573] FLJ12921 (Accession NP_079151.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ12921 BINDING SITE1 and FLJ12921 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ12921, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ12921 BINDING SITE1 and FLJ12921 BINDING SITE2, designated SEQ ID:15316 and SEQ ID:15108 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55574] Another function of GAM7957 is therefore inhibition of FLJ12921 (Accession NP_079151.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ12921.

[55575] FLJ12986 (Accession XP_290685.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ12986

BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ12986, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ12986 BINDING SITE, designated SEQ ID:6600, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55576] Another function of GAM7957 is therefore inhibition of FLJ12986 (Accession XP_290685.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ12986.

[55577] FLJ13154 (Accession NP_078874.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ13154 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FLJ13154, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ13154 BINDING SITE, designated SEQ ID:13134, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55578] Another function of GAM7957 is therefore inhibition of FLJ13154 (Accession NP_078874.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ13154.

[55579] FLJ13162 (Accession NP_079278.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ13162 BINDING SITE is a target binding site found in the 3` un-translated region of mRNA encoded by FLJ13162, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ13162 BINDING SITE, designated SEQ ID:19052, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55580] Another function of GAM7957 is therefore inhibition of FLJ13162 (Accession NP_079278.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ13162.

[55581] FLJ13171 (Accession NP_076412.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ13171 BINDING SITE is a target binding site found in the 3` un-

translated region of mRNA encoded by FLJ13171, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ13171 BINDING SITE, designated SEQ ID:9763, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55582] Another function of GAM7957 is therefore inhibition of FLJ13171 (Accession NP_076412.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ13171.

[55583] FLJ13236 (Accession NP_079178.2) is another GAM7957 target gene, herein designated TARGET GENE. FLJ13236 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ13236, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ13236 BINDING SITE, designated SEQ ID:6757, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55584] Another function of GAM7957 is therefore inhibition of

FLJ13236 (Accession NP_079178.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ13236.

[55585] FLJ13241 (Accession NP_079364.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ13241 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ13241, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ13241 BINDING SITE, designated SEQ ID:9173, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55586] Another function of GAM7957 is therefore inhibition of FLJ13241 (Accession NP_079364.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ13241.

[55587] FLJ13305 (Accession XP_291019.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ13305 BINDING SITE1 and FLJ13305 BINDING SITE2 are target binding sites found in untranslated regions of mRNA en-

coded by FLJ13305, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ13305 BINDING SITE1 and FLJ13305 BINDING SITE2, designated SEQ ID:8647 and SEQ ID:7048 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55588] Another function of GAM7957 is therefore inhibition of FLJ13305 (Accession XP_291019.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ13305.

[55589] FLJ13448 (Accession NP_079423.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ13448 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ13448, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ13448 BINDING SITE, designated SEQ ID:17453, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55590] Another function of GAM7957 is therefore inhibition of FLJ13448 (Accession NP_079423.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ13448.

[55591] FLJ13456 (Accession XP_038291.5) is another GAM7957 target gene, herein designated TARGET GENE. FLJ13456 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ13456, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ13456 BINDING SITE, designated SEQ ID:8296, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55592] Another function of GAM7957 is therefore inhibition of FLJ13456 (Accession XP_038291.5) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ13456.

[55593] FLJ13544 (Accession NP_079284.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ13544 BINDING SITE is a target binding site found in the 3' un-

translated region of mRNA encoded by FLJ13544, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ13544 BINDING SITE, designated SEQ ID:16514, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55594] Another function of GAM7957 is therefore inhibition of FLJ13544 (Accession NP_079284.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ13544.

[55595] FLJ13611 (Accession NP_079217.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ13611 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ13611, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ13611 BINDING SITE, designated SEQ ID:12723, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55596] Another function of GAM7957 is therefore inhibition of

FLJ13611 (Accession NP_079217.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ13611.

[55597] FLJ13621 (Accession NP_079285.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ13621 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ13621, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ13621 BINDING SITE, designated SEQ ID:15343, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55598] Another function of GAM7957 is therefore inhibition of FLJ13621 (Accession NP_079285.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ13621.

[55599] FLJ13769 (Accession NP_079288.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ13769 BINDING SITE1 and FLJ13769 BINDING SITE2 are target binding sites found in untranslated regions of mRNA en-

coded by FLJ13769, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ13769 BINDING SITE1 and FLJ13769 BINDING SITE2, designated SEQ ID:15089 and SEQ ID:19422 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55600] Another function of GAM7957 is therefore inhibition of FLJ13769 (Accession NP_079288.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ13769.

[55601] FLJ13984 (Accession NP_079046.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ13984 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ13984, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ13984 BINDING SITE, designated SEQ ID:7450, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55602] Another function of GAM7957 is therefore inhibition of FLJ13984 (Accession NP_079046.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ13984.

[55603] FLJ14069 (Accession NP_079299.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ14069 BINDING SITE is a target binding site found in the 3` un-translated region of mRNA encoded by FLJ14069, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ14069 BINDING SITE, designated SEQ ID:19033, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55604] Another function of GAM7957 is therefore inhibition of FLJ14069 (Accession NP_079299.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ14069.

[55605] FLJ14100 (Accession NP_079301.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ14100 BINDING SITE1 and FLJ14100 BINDING SITE2 are target

binding sites found in untranslated regions of mRNA encoded by FLJ14100, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ14100 BINDING SITE1 and FLJ14100 BINDING SITE2, designated SEQ ID:4880 and SEQ ID:4061 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55606] Another function of GAM7957 is therefore inhibition of FLJ14100 (Accession NP_079301.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ14100.

[55607] FLJ14117 (Accession NP_073614.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ14117 BINDING SITE1 through FLJ14117 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by FLJ14117, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ14117 BINDING SITE1 through FLJ14117 BINDING SITE3, designated SEQ ID:7796, SEQ

ID:4313 and SEQ ID:10125 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55608] Another function of GAM7957 is therefore inhibition of FLJ14117 (Accession NP_073614.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ14117.

[55609] FLJ14129 (Accession NP_112157.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ14129 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ14129, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ14129 BINDING SITE, designated SEQ ID:10918, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55610] Another function of GAM7957 is therefore inhibition of FLJ14129 (Accession NP_112157.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ14129.

[55611] FLJ14327 (Accession NP_079188.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ14327 BINDING SITE1 and FLJ14327 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ14327, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ14327 BINDING SITE1 and FLJ14327 BINDING SITE2, designated SEQ ID:17423 and SEQ ID:13517 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55612] Another function of GAM7957 is therefore inhibition of FLJ14327 (Accession NP_079188.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ14327.

[55613] FLJ14345 (Accession NP_079009.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ14345 BINDING SITE1 and FLJ14345 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ14345, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III

of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ14345 BINDING SITE1 and FLJ14345 BINDING SITE2, designated SEQ ID:14502 and SEQ ID:1492 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55614] Another function of GAM7957 is therefore inhibition of FLJ14345 (Accession NP_079009.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ14345.

[55615] FLJ14397 (Accession NP_116168.2) is another GAM7957 target gene, herein designated TARGET GENE. FLJ14397 BINDING SITE1 and FLJ14397 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ14397, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ14397 BINDING SITE1 and FLJ14397 BINDING SITE2, designated SEQ ID:15345 and SEQ ID:4880 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55616] Another function of GAM7957 is therefore inhibition of FLJ14397 (Accession NP_116168.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ14397.

[55617] FLJ14457 (Accession NP_116177.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ14457 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ14457, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ14457 BINDING SITE, designated SEQ ID:18269, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55618] Another function of GAM7957 is therefore inhibition of FLJ14457 (Accession NP_116177.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ14457.

[55619] FLJ14466 (Accession NP_116179.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ14466 BINDING SITE1 through FLJ14466 BINDING SITE3 are target

binding sites found in untranslated regions of mRNA encoded by FLJ14466, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ14466 BINDING SITE1 through FLJ14466 BINDING SITE3, designated SEQ ID:14789, SEQ ID:5830 and SEQ ID:16279 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55620] Another function of GAM7957 is therefore inhibition of FLJ14466 (Accession NP_116179.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ14466.

[55621] FLJ14490 (Accession NP_116182.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ14490 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ14490, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ14490 BINDING SITE, designated SEQ ID:10571, to the nucleotide sequence of GAM7957 RNA, herein designated

GAM RNA, also designated SEQ ID:297.

[55622] Another function of GAM7957 is therefore inhibition of FLJ14490 (Accession NP_116182.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ14490.

[55623] FLJ14642 (Accession NP_116207.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ14642 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ14642, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ14642 BINDING SITE, designated SEQ ID:16502, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55624] Another function of GAM7957 is therefore inhibition of FLJ14642 (Accession NP_116207.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ14642.

[55625] FLJ20006 (Accession NP_060088.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ20006

BINDING SITE1 and FLJ20006 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ20006, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20006 BINDING SITE1 and FLJ20006 BINDING SITE2, designated SEQ ID:14201 and SEQ ID:6217 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55626] Another function of GAM7957 is therefore inhibition of FLJ20006 (Accession NP_060088.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20006.

[55627] FLJ20013 (Accession NP_060091.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ20013 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ20013, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20013 BINDING SITE, designated SEQ ID:14786, to the

nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55628] Another function of GAM7957 is therefore inhibition of FLJ20013 (Accession NP_060091.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20013.

[55629] FLJ20019 (Accession NP_060094.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ20019 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ20019, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20019 BINDING SITE, designated SEQ ID:10518, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55630] Another function of GAM7957 is therefore inhibition of FLJ20019 (Accession NP_060094.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20019.

[55631] FLJ20045 (Accession NP_060108.1) is another GAM7957

target gene, herein designated TARGET GENE. FLJ20045 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ20045, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20045 BINDING SITE, designated SEQ ID:13209, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55632] Another function of GAM7957 is therefore inhibition of FLJ20045 (Accession NP_060108.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20045.

[55633] FLJ20069 (Accession NP_060121.3) is another GAM7957 target gene, herein designated TARGET GENE. FLJ20069 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ20069, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20069 BINDING SITE, designated SEQ ID:17194, to the nucleotide sequence of GAM7957 RNA, herein designated

GAM RNA, also designated SEQ ID:297.

[55634] Another function of GAM7957 is therefore inhibition of FLJ20069 (Accession NP_060121.3) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20069.

[55635] FLJ20139 (Accession NP_060155.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ20139 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ20139, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20139 BINDING SITE, designated SEQ ID:12593, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55636] Another function of GAM7957 is therefore inhibition of FLJ20139 (Accession NP_060155.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20139.

[55637] FLJ20151 (Accession NP_060159.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ20151

BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ20151, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20151 BINDING SITE, designated SEQ ID:17280, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55638] Another function of GAM7957 is therefore inhibition of FLJ20151 (Accession NP_060159.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20151.

[55639] FLJ20152 (Accession NP_061873.2) is another GAM7957 target gene, herein designated TARGET GENE. FLJ20152 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FLJ20152, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20152 BINDING SITE, designated SEQ ID:17311, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55640] Another function of GAM7957 is therefore inhibition of FLJ20152 (Accession NP_061873.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20152.

[55641] FLJ20203 (Accession NP_115668.2) is another GAM7957 target gene, herein designated TARGET GENE. FLJ20203 BINDING SITE1 and FLJ20203 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by FLJ20203, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20203 BINDING SITE1 and FLJ20203 BINDING SITE2, designated SEQ ID:15426 and SEQ ID:3492 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55642] Another function of GAM7957 is therefore inhibition of FLJ20203 (Accession NP_115668.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20203.

[55643] FLJ20211 (Accession NP_060183.1) is another GAM7957

target gene, herein designated TARGET GENE. FLJ20211 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ20211, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20211 BINDING SITE, designated SEQ ID:13691, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55644] Another function of GAM7957 is therefore inhibition of FLJ20211 (Accession NP_060183.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20211.

[55645] FLJ20257 (Accession NP_062552.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ20257 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ20257, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20257 BINDING SITE, designated SEQ ID:17007, to the nucleotide sequence of GAM7957 RNA, herein designated

GAM RNA, also designated SEQ ID:297.

[55646] Another function of GAM7957 is therefore inhibition of FLJ20257 (Accession NP_062552.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20257.

[55647] FLJ20280 (Accession NP_060211.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ20280 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ20280, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20280 BINDING SITE, designated SEQ ID:12403, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55648] Another function of GAM7957 is therefore inhibition of FLJ20280 (Accession NP_060211.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20280.

[55649] FLJ20306 (Accession NP_060226.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ20306

BINDING SITE1 and FLJ20306 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ20306, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20306 BINDING SITE1 and FLJ20306 BINDING SITE2, designated SEQ ID:3975 and SEQ ID:15330 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55650] Another function of GAM7957 is therefore inhibition of FLJ20306 (Accession NP_060226.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20306.

[55651] FLJ20337 (Accession NP_060242.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ20337 BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by FLJ20337, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20337 BINDING SITE, designated SEQ ID:4177, to the

nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55652] Another function of GAM7957 is therefore inhibition of FLJ20337 (Accession NP_060242.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20337.

[55653] FLJ20413 (Accession NP_060278.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ20413 BINDING SITE1 and FLJ20413 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ20413, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20413 BINDING SITE1 and FLJ20413 BINDING SITE2, designated SEQ ID:10318 and SEQ ID:13155 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55654] Another function of GAM7957 is therefore inhibition of FLJ20413 (Accession NP_060278.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

FLJ20413.

[55655] FLJ20452 (Accession NP_060298.2) is another GAM7957 target gene, herein designated TARGET GENE. FLJ20452 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ20452, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20452 BINDING SITE, designated SEQ ID:11133, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55656] Another function of GAM7957 is therefore inhibition of FLJ20452 (Accession NP_060298.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20452.

[55657] FLJ20464 (Accession NP_060304.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ20464 BINDING SITE1 and FLJ20464 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ20464, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the

nucleotide sequences of FLJ20464 BINDING SITE1 and FLJ20464 BINDING SITE2, designated SEQ ID:16904 and SEQ ID:15056 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55658] Another function of GAM7957 is therefore inhibition of FLJ20464 (Accession NP_060304.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20464.

[55659] FLJ20531 (Accession NP_060335.2) is another GAM7957 target gene, herein designated TARGET GENE. FLJ20531 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by FLJ20531, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20531 BINDING SITE, designated SEQ ID:7783, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55660] Another function of GAM7957 is therefore inhibition of FLJ20531 (Accession NP_060335.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment

of diseases and clinical conditions associated with FLJ20531.

[55661] FLJ20671 (Accession NP_060394.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ20671 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ20671, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20671 BINDING SITE, designated SEQ ID:19100, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55662] Another function of GAM7957 is therefore inhibition of FLJ20671 (Accession NP_060394.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20671.

[55663] FLJ20686 (Accession NP_060395.2) is another GAM7957 target gene, herein designated TARGET GENE. FLJ20686 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ20686, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of FLJ20686 BINDING SITE, designated SEQ ID:2852, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55664] Another function of GAM7957 is therefore inhibition of FLJ20686 (Accession NP_060395.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20686.

[55665] FLJ20694 (Accession NP_060398.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ20694 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ20694, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20694 BINDING SITE, designated SEQ ID:17403, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55666] Another function of GAM7957 is therefore inhibition of FLJ20694 (Accession NP_060398.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

FLJ20694.

[55667] FLJ20700 (Accession NP_060402.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ20700 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ20700, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20700 BINDING SITE, designated SEQ ID:16856, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55668] Another function of GAM7957 is therefore inhibition of FLJ20700 (Accession NP_060402.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20700.

[55669] FLJ20802 (Accession NP_060429.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ20802 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ20802, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

FLJ20802 BINDING SITE, designated SEQ ID:4334, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55670] Another function of GAM7957 is therefore inhibition of FLJ20802 (Accession NP_060429.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20802.

[55671] FLJ20825 (Accession NP_060432.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ20825 BINDING SITE1 through FLJ20825 BINDING SITE5 are target binding sites found in untranslated regions of mRNA encoded by FLJ20825, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20825 BINDING SITE1 through FLJ20825 BINDING SITE5, designated SEQ ID:6889, SEQ ID:8889, SEQ ID:6040, SEQ ID:805 and SEQ ID:19263 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55672] Another function of GAM7957 is therefore inhibition of FLJ20825 (Accession NP_060432.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment

of diseases and clinical conditions associated with FLJ20825.

[55673] FLJ20909 (Accession NP_078969.2) is another GAM7957 target gene, herein designated TARGET GENE. FLJ20909 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ20909, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20909 BINDING SITE, designated SEQ ID:18412, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55674] Another function of GAM7957 is therefore inhibition of FLJ20909 (Accession NP_078969.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20909.

[55675] FLJ20972 (Accession NP_079306.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ20972 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ20972, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of FLJ20972 BINDING SITE, designated SEQ ID:13690, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55676] Another function of GAM7957 is therefore inhibition of FLJ20972 (Accession NP_079306.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20972.

[55677] FLJ21135 (Accession NP_079142.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ21135 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ21135, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ21135 BINDING SITE, designated SEQ ID:14182, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55678] Another function of GAM7957 is therefore inhibition of FLJ21135 (Accession NP_079142.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

FLJ21135.

[55679] FLJ21144 (Accession NP_073611.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ21144 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ21144, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ21144 BINDING SITE, designated SEQ ID:3619, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55680] Another function of GAM7957 is therefore inhibition of FLJ21144 (Accession NP_073611.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ21144.

[55681] FLJ21240 (Accession NP_079123.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ21240 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ21240, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

FLJ21240 BINDING SITE, designated SEQ ID:16290, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55682] Another function of GAM7957 is therefore inhibition of FLJ21240 (Accession NP_079123.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ21240.

[55683] FLJ21603 (Accession NP_079038.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ21603 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ21603, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ21603 BINDING SITE, designated SEQ ID:13858, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55684] Another function of GAM7957 is therefore inhibition of FLJ21603 (Accession NP_079038.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ21603.

[55685] FLJ21657 (Accession NP_071928.2) is another GAM7957 target gene, herein designated TARGET GENE. FLJ21657 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ21657, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ21657 BINDING SITE, designated SEQ ID:13061, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55686] Another function of GAM7957 is therefore inhibition of FLJ21657 (Accession NP_071928.2). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ21657.

[55687] FLJ21673 (Accession NP_112160.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ21673 BINDING SITE1 and FLJ21673 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ21673, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ21673 BINDING SITE1 and

FLJ21673 BINDING SITE2, designated SEQ ID:19796 and SEQ ID:16286 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55688] Another function of GAM7957 is therefore inhibition of FLJ21673 (Accession NP_112160.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ21673.

[55689] FLJ21687 (Accession NP_079135.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ21687 BINDING SITE1 and FLJ21687 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ21687, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ21687 BINDING SITE1 and FLJ21687 BINDING SITE2, designated SEQ ID:19018 and SEQ ID:17803 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55690] Another function of GAM7957 is therefore inhibition of FLJ21687 (Accession NP_079135.1) . Accordingly, utilities

of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ21687.

[55691] FLJ21777 (Accession NP_115585.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ21777 BINDING SITE1 and FLJ21777 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ21777, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ21777 BINDING SITE1 and FLJ21777 BINDING SITE2, designated SEQ ID:627 and SEQ ID:11407 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55692] Another function of GAM7957 is therefore inhibition of FLJ21777 (Accession NP_115585.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ21777.

[55693] FLJ21870 (Accession NP_075392.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ21870 BINDING SITE is a target binding site found in the 3' un-

translated region of mRNA encoded by FLJ21870, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ21870 BINDING SITE, designated SEQ ID:6605, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55694] Another function of GAM7957 is therefore inhibition of FLJ21870 (Accession NP_075392.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ21870.

[55695] FLJ22054 (Accession NP_078837.2) is another GAM7957 target gene, herein designated TARGET GENE. FLJ22054 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ22054, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ22054 BINDING SITE, designated SEQ ID:17423, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55696] Another function of GAM7957 is therefore inhibition of

FLJ22054 (Accession NP_078837.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ22054.

[55697] FLJ22173 (Accession NP_079317.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ22173 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FLJ22173, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ22173 BINDING SITE, designated SEQ ID:17804, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55698] Another function of GAM7957 is therefore inhibition of FLJ22173 (Accession NP_079317.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ22173.

[55699] FLJ22313 (Accession NP_071768.2) is another GAM7957 target gene, herein designated TARGET GENE. FLJ22313 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ22313, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ22313 BINDING SITE, designated SEQ ID:14789, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55700] Another function of GAM7957 is therefore inhibition of FLJ22313 (Accession NP_071768.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ22313.

[55701] FLJ22415 (Accession NP_079045.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ22415 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ22415, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ22415 BINDING SITE, designated SEQ ID:4373, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55702] Another function of GAM7957 is therefore inhibition of FLJ22415 (Accession NP_079045.1) . Accordingly, utilities

of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ22415.

[55703] FLJ22692 (Accession NP_079325.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ22692 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ22692, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ22692 BINDING SITE, designated SEQ ID:7048, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55704] Another function of GAM7957 is therefore inhibition of FLJ22692 (Accession NP_079325.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ22692.

[55705] FLJ22814 (Accession NP_079192.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ22814 BINDING SITE1 through FLJ22814 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by FLJ22814, corresponding to target binding sites

such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ22814 BINDING SITE1 through FLJ22814 BINDING SITE3, designated SEQ ID:2026, SEQ ID:8877 and SEQ ID:15203 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55706] Another function of GAM7957 is therefore inhibition of FLJ22814 (Accession NP_079192.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ22814.

[55707] FLJ22965 (Accession NP_071384.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ22965 BINDING SITE1 and FLJ22965 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ22965, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ22965 BINDING SITE1 and FLJ22965 BINDING SITE2, designated SEQ ID:18688 and SEQ ID:17741 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also design-

nated SEQ ID:297.

[55708] Another function of GAM7957 is therefore inhibition of FLJ22965 (Accession NP_071384.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ22965.

[55709] FLJ23022 (Accession NP_079327.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ23022 BINDING SITE1 and FLJ23022 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ23022, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ23022 BINDING SITE1 and FLJ23022 BINDING SITE2, designated SEQ ID:5830 and SEQ ID:9765 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55710] Another function of GAM7957 is therefore inhibition of FLJ23022 (Accession NP_079327.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ23022.

[55711] FLJ23040 (Accession NP_079450.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ23040 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ23040, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ23040 BINDING SITE, designated SEQ ID:5732, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55712] Another function of GAM7957 is therefore inhibition of FLJ23040 (Accession NP_079450.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ23040.

[55713] FLJ23042 (Accession NP_079433.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ23042 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ23042, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ23042 BINDING SITE, designated SEQ ID:9948, to the

nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55714] Another function of GAM7957 is therefore inhibition of FLJ23042 (Accession NP_079433.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ23042.

[55715] FLJ23185 (Accession NP_079332.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ23185 BINDING SITE1 and FLJ23185 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ23185, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ23185 BINDING SITE1 and FLJ23185 BINDING SITE2, designated SEQ ID:11247 and SEQ ID:10998 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55716] Another function of GAM7957 is therefore inhibition of FLJ23185 (Accession NP_079332.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

FLJ23185.

[55717] FLJ23235 (Accession NP_079219.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ23235 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ23235, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ23235 BINDING SITE, designated SEQ ID:17838, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55718] Another function of GAM7957 is therefore inhibition of FLJ23235 (Accession NP_079219.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ23235.

[55719] FLJ23322 (Accession NP_079231.3) is another GAM7957 target gene, herein designated TARGET GENE. FLJ23322 BINDING SITE1 and FLJ23322 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ23322, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the

nucleotide sequences of FLJ23322 BINDING SITE1 and FLJ23322 BINDING SITE2, designated SEQ ID:8548 and SEQ ID:11740 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55720] Another function of GAM7957 is therefore inhibition of FLJ23322 (Accession NP_079231.3) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ23322.

[55721] FLJ23356 (Accession NP_115613.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ23356 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ23356, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ23356 BINDING SITE, designated SEQ ID:2436, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55722] Another function of GAM7957 is therefore inhibition of FLJ23356 (Accession NP_115613.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment

of diseases and clinical conditions associated with FLJ23356.

[55723] FLJ23360 (Accession NP_075564.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ23360 BINDING SITE1 and FLJ23360 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ23360, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ23360 BINDING SITE1 and FLJ23360 BINDING SITE2, designated SEQ ID:13066 and SEQ ID:5830 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55724] Another function of GAM7957 is therefore inhibition of FLJ23360 (Accession NP_075564.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ23360.

[55725] FLJ23436 (Accession NP_078947.2) is another GAM7957 target gene, herein designated TARGET GENE. FLJ23436 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FLJ23436, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ23436 BINDING SITE, designated SEQ ID:8839, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55726] Another function of GAM7957 is therefore inhibition of FLJ23436 (Accession NP_078947.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ23436.

[55727] FLJ23499 (Accession NP_073598.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ23499 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ23499, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ23499 BINDING SITE, designated SEQ ID:4310, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55728] Another function of GAM7957 is therefore inhibition of FLJ23499 (Accession NP_073598.1) . Accordingly, utilities

of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ23499.

[55729] FLJ23537 (Accession NP_079165.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ23537 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ23537, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ23537 BINDING SITE, designated SEQ ID:10013, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55730] Another function of GAM7957 is therefore inhibition of FLJ23537 (Accession NP_079165.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ23537.

[55731] FLJ23754 (Accession NP_689888.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ23754 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ23754, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ23754 BINDING SITE, designated SEQ ID:13853, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55732] Another function of GAM7957 is therefore inhibition of FLJ23754 (Accession NP_689888.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ23754.

[55733] FLJ23865 (Accession NP_689882.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ23865 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ23865, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ23865 BINDING SITE, designated SEQ ID:7778, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55734] Another function of GAM7957 is therefore inhibition of FLJ23865 (Accession NP_689882.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment

of diseases and clinical conditions associated with FLJ23865.

[55735] FLJ23878 (Accession NP_659427.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ23878 BINDING SITE1 and FLJ23878 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ23878, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ23878 BINDING SITE1 and FLJ23878 BINDING SITE2, designated SEQ ID:15315 and SEQ ID:19119 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55736] Another function of GAM7957 is therefore inhibition of FLJ23878 (Accession NP_659427.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ23878.

[55737] FLJ25006 (Accession NP_653211.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ25006 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ25006, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ25006 BINDING SITE, designated SEQ ID:19211, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55738] Another function of GAM7957 is therefore inhibition of FLJ25006 (Accession NP_653211.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ25006.

[55739] FLJ25613 (Accession NP_775865.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ25613 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ25613, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ25613 BINDING SITE, designated SEQ ID:8469, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55740] Another function of GAM7957 is therefore inhibition of FLJ25613 (Accession NP_775865.1) . Accordingly, utilities

of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ25613.

[55741] FLJ30092 (Accession NP_659420.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ30092 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ30092, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ30092 BINDING SITE, designated SEQ ID:6927, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55742] Another function of GAM7957 is therefore inhibition of FLJ30092 (Accession NP_659420.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ30092.

[55743] FLJ30317 (Accession NP_742148.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ30317 BINDING SITE1 and FLJ30317 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ30317, corresponding to target binding sites

such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ30317 BINDING SITE1 and FLJ30317 BINDING SITE2, designated SEQ ID:7121 and SEQ ID:6683 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55744] Another function of GAM7957 is therefore inhibition of FLJ30317 (Accession NP_742148.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ30317.

[55745] FLJ30507 (Accession NP_694555.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ30507 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by FLJ30507, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ30507 BINDING SITE, designated SEQ ID:5647, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55746] Another function of GAM7957 is therefore inhibition of

FLJ30507 (Accession NP_694555.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ30507.

[55747] FLJ30594 (Accession NP_694556.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ30594 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ30594, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ30594 BINDING SITE, designated SEQ ID:9422, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55748] Another function of GAM7957 is therefore inhibition of FLJ30594 (Accession NP_694556.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ30594.

[55749] FLJ30679 (Accession NP_694562.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ30679 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ30679, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ30679 BINDING SITE, designated SEQ ID:8173, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55750] Another function of GAM7957 is therefore inhibition of FLJ30679 (Accession NP_694562.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ30679.

[55751] FLJ30791 (Accession NP_653295.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ30791 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FLJ30791, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ30791 BINDING SITE, designated SEQ ID:7170, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55752] Another function of GAM7957 is therefore inhibition of FLJ30791 (Accession NP_653295.1) . Accordingly, utilities

of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ30791.

[55753] FLJ30899 (Accession NP_689943.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ30899 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ30899, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ30899 BINDING SITE, designated SEQ ID:19054, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55754] Another function of GAM7957 is therefore inhibition of FLJ30899 (Accession NP_689943.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ30899.

[55755] FLJ31034 (Accession NP_689937.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ31034 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ31034, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ31034 BINDING SITE, designated SEQ ID:9589, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55756] Another function of GAM7957 is therefore inhibition of FLJ31034 (Accession NP_689937.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ31034.

[55757] FLJ31052 (Accession NP_689591.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ31052 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FLJ31052, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ31052 BINDING SITE, designated SEQ ID:15521, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55758] Another function of GAM7957 is therefore inhibition of FLJ31052 (Accession NP_689591.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment

of diseases and clinical conditions associated with FLJ31052.

[55759] FLJ31158 (Accession NP_689782.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ31158 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ31158, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ31158 BINDING SITE, designated SEQ ID:2160, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55760] Another function of GAM7957 is therefore inhibition of FLJ31158 (Accession NP_689782.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ31158.

[55761] FLJ31208 (Accession NP_694568.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ31208 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ31208, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of FLJ31208 BINDING SITE, designated SEQ ID:14200, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55762] Another function of GAM7957 is therefore inhibition of FLJ31208 (Accession NP_694568.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ31208.

[55763] FLJ31322 (Accession NP_689600.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ31322 BINDING SITE1 and FLJ31322 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ31322, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ31322 BINDING SITE1 and FLJ31322 BINDING SITE2, designated SEQ ID:6650 and SEQ ID:13125 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55764] Another function of GAM7957 is therefore inhibition of FLJ31322 (Accession NP_689600.1) . Accordingly, utilities

of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ31322.

[55765] FLJ31331 (Accession NP_689743.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ31331 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ31331, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ31331 BINDING SITE, designated SEQ ID:9421, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55766] Another function of GAM7957 is therefore inhibition of FLJ31331 (Accession NP_689743.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ31331.

[55767] FLJ31434 (Accession NP_689709.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ31434 BINDING SITE1 and FLJ31434 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ31434, corresponding to target binding sites

such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ31434 BINDING SITE1 and FLJ31434 BINDING SITE2, designated SEQ ID:1420 and SEQ ID:15343 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55768] Another function of GAM7957 is therefore inhibition of FLJ31434 (Accession NP_689709.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ31434.

[55769] FLJ31455 (Accession NP_659401.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ31455 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ31455, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ31455 BINDING SITE, designated SEQ ID:15977, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55770] Another function of GAM7957 is therefore inhibition of

FLJ31455 (Accession NP_659401.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ31455.

[55771] FLJ31568 (Accession NP_689722.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ31568 BINDING SITE1 and FLJ31568 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ31568, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ31568 BINDING SITE1 and FLJ31568 BINDING SITE2, designated SEQ ID:18229 and SEQ ID:20105 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55772] Another function of GAM7957 is therefore inhibition of FLJ31568 (Accession NP_689722.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ31568.

[55773] FLJ31737 (Accession NP_659421.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ31737

BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ31737, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ31737 BINDING SITE, designated SEQ ID:6645, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55774] Another function of GAM7957 is therefore inhibition of FLJ31737 (Accession NP_659421.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ31737.

[55775] FLJ31819 (Accession NP_689742.2) is another GAM7957 target gene, herein designated TARGET GENE. FLJ31819 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ31819, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ31819 BINDING SITE, designated SEQ ID:12402, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55776] Another function of GAM7957 is therefore inhibition of FLJ31819 (Accession NP_689742.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ31819.

[55777] FLJ31842 (Accession NP_689700.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ31842 BINDING SITE1 and FLJ31842 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ31842, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ31842 BINDING SITE1 and FLJ31842 BINDING SITE2, designated SEQ ID:5671 and SEQ ID:5830 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55778] Another function of GAM7957 is therefore inhibition of FLJ31842 (Accession NP_689700.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ31842.

[55779] FLJ31846 (Accession NP_659411.1) is another GAM7957

target gene, herein designated TARGET GENE. FLJ31846 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FLJ31846, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ31846 BINDING SITE, designated SEQ ID:17941, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55780] Another function of GAM7957 is therefore inhibition of FLJ31846 (Accession NP_659411.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ31846.

[55781] FLJ31882 (Accession NP_689673.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ31882 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ31882, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ31882 BINDING SITE, designated SEQ ID:11921, to the nucleotide sequence of GAM7957 RNA, herein designated

GAM RNA, also designated SEQ ID:297.

[55782] Another function of GAM7957 is therefore inhibition of FLJ31882 (Accession NP_689673.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ31882.

[55783] FLJ31952 (Accession NP_653283.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ31952 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ31952, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ31952 BINDING SITE, designated SEQ ID:8772, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55784] Another function of GAM7957 is therefore inhibition of FLJ31952 (Accession NP_653283.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ31952.

[55785] FLJ31958 (Accession NP_694575.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ31958

BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ31958, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ31958 BINDING SITE, designated SEQ ID:694, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55786] Another function of GAM7957 is therefore inhibition of FLJ31958 (Accession NP_694575.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ31958.

[55787] FLJ32029 (Accession NP_775853.2) is another GAM7957 target gene, herein designated TARGET GENE. FLJ32029 BINDING SITE1 through FLJ32029 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by FLJ32029, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ32029 BINDING SITE1 through FLJ32029 BINDING SITE3, designated SEQ ID:19975, SEQ ID:1492 and SEQ ID:15089 respectively, to the nucleotide

sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55788] Another function of GAM7957 is therefore inhibition of FLJ32029 (Accession NP_775853.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ32029.

[55789] FLJ32214 (Accession NP_689686.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ32214 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ32214, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ32214 BINDING SITE, designated SEQ ID:3464, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55790] Another function of GAM7957 is therefore inhibition of FLJ32214 (Accession NP_689686.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ32214.

[55791] FLJ32384 (Accession NP_653209.1) is another GAM7957

target gene, herein designated TARGET GENE. FLJ32384 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ32384, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ32384 BINDING SITE, designated SEQ ID:12664, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55792] Another function of GAM7957 is therefore inhibition of FLJ32384 (Accession NP_653209.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ32384.

[55793] FLJ32535 (Accession NP_689760.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ32535 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ32535, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ32535 BINDING SITE, designated SEQ ID:8019, to the nucleotide sequence of GAM7957 RNA, herein designated

GAM RNA, also designated SEQ ID:297.

[55794] Another function of GAM7957 is therefore inhibition of FLJ32535 (Accession NP_689760.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ32535.

[55795] FLJ32915 (Accession NP_659451.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ32915 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FLJ32915, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ32915 BINDING SITE, designated SEQ ID:8190, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55796] Another function of GAM7957 is therefore inhibition of FLJ32915 (Accession NP_659451.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ32915.

[55797] FLJ33207 (Accession NP_848649.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ33207

BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ33207, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ33207 BINDING SITE, designated SEQ ID:5805, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55798] Another function of GAM7957 is therefore inhibition of FLJ33207 (Accession NP_848649.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ33207.

[55799] FLJ33298 (Accession NP_775907.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ33298 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ33298, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ33298 BINDING SITE, designated SEQ ID:4903, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55800] Another function of GAM7957 is therefore inhibition of FLJ33298 (Accession NP_775907.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ33298.

[55801] FLJ33505 (Accession NP_689530.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ33505 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ33505, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ33505 BINDING SITE, designated SEQ ID:7314, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55802] Another function of GAM7957 is therefore inhibition of FLJ33505 (Accession NP_689530.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ33505.

[55803] FLJ33610 (Accession NP_775968.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ33610 BINDING SITE is a target binding site found in the 3' un-

translated region of mRNA encoded by FLJ33610, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ33610 BINDING SITE, designated SEQ ID:11488, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55804] Another function of GAM7957 is therefore inhibition of FLJ33610 (Accession NP_775968.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ33610.

[55805] FLJ33674 (Accession XP_291074.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ33674 BINDING SITE1 and FLJ33674 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ33674, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ33674 BINDING SITE1 and FLJ33674 BINDING SITE2, designated SEQ ID:11561 and SEQ ID:1928 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also design-

nated SEQ ID:297.

[55806] Another function of GAM7957 is therefore inhibition of FLJ33674 (Accession XP_291074.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ33674.

[55807] FLJ33790 (Accession NP_775854.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ33790 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ33790, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ33790 BINDING SITE, designated SEQ ID:12060, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55808] Another function of GAM7957 is therefore inhibition of FLJ33790 (Accession NP_775854.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ33790.

[55809] FLJ33979 (Accession NP_689849.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ33979

BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ33979, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ33979 BINDING SITE, designated SEQ ID:592, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55810] Another function of GAM7957 is therefore inhibition of FLJ33979 (Accession NP_689849.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ33979.

[55811] FLJ34047 (Accession NP_775940.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ34047 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ34047, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ34047 BINDING SITE, designated SEQ ID:15371, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55812] Another function of GAM7957 is therefore inhibition of FLJ34047 (Accession NP_775940.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ34047.

[55813] FLJ34278 (Accession NP_775873.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ34278 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ34278, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ34278 BINDING SITE, designated SEQ ID:12930, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55814] Another function of GAM7957 is therefore inhibition of FLJ34278 (Accession NP_775873.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ34278.

[55815] FLJ34817 (Accession NP_689516.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ34817 BINDING SITE is a target binding site found in the 3' un-

translated region of mRNA encoded by FLJ34817, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ34817 BINDING SITE, designated SEQ ID:9991, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55816] Another function of GAM7957 is therefore inhibition of FLJ34817 (Accession NP_689516.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ34817.

[55817] FLJ34969 (Accession XP_114353.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ34969 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ34969, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ34969 BINDING SITE, designated SEQ ID:9420, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55818] Another function of GAM7957 is therefore inhibition of

FLJ34969 (Accession XP_114353.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ34969.

[55819] FLJ35119 (Accession NP_787067.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ35119 BINDING SITE1 and FLJ35119 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ35119, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ35119 BINDING SITE1 and FLJ35119 BINDING SITE2, designated SEQ ID:13065 and SEQ ID:4404 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55820] Another function of GAM7957 is therefore inhibition of FLJ35119 (Accession NP_787067.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ35119.

[55821] FLJ35681 (Accession NP_787096.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ35681

BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ35681, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ35681 BINDING SITE, designated SEQ ID:13398, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55822] Another function of GAM7957 is therefore inhibition of FLJ35681 (Accession NP_787096.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ35681.

[55823] FLJ35740 (Accession NP_671728.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ35740 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ35740, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ35740 BINDING SITE, designated SEQ ID:7183, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55824] Another function of GAM7957 is therefore inhibition of FLJ35740 (Accession NP_671728.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ35740.

[55825] FLJ35848 (Accession XP_290755.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ35848 BINDING SITE is a target binding site found in the 3` un-translated region of mRNA encoded by FLJ35848, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ35848 BINDING SITE, designated SEQ ID:9398, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55826] Another function of GAM7957 is therefore inhibition of FLJ35848 (Accession XP_290755.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ35848.

[55827] FLJ35936 (Accession NP_775735.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ35936 BINDING SITE is a target binding site found in the 3` un-

translated region of mRNA encoded by FLJ35936, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ35936 BINDING SITE, designated SEQ ID:13467, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55828] Another function of GAM7957 is therefore inhibition of FLJ35936 (Accession NP_775735.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ35936.

[55829] FLJ36812 (Accession NP_694992.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ36812 BINDING SITE1 and FLJ36812 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ36812, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ36812 BINDING SITE1 and FLJ36812 BINDING SITE2, designated SEQ ID:12792 and SEQ ID:15984 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also design-

nated SEQ ID:297.

[55830] Another function of GAM7957 is therefore inhibition of FLJ36812 (Accession NP_694992.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ36812.

[55831] FLJ37131 (Accession NP_775958.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ37131 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ37131, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ37131 BINDING SITE, designated SEQ ID:19393, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55832] Another function of GAM7957 is therefore inhibition of FLJ37131 (Accession NP_775958.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ37131.

[55833] FLJ37228 (Accession NP_787113.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ37228

BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ37228, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ37228 BINDING SITE, designated SEQ ID:12334, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55834] Another function of GAM7957 is therefore inhibition of FLJ37228 (Accession NP_787113.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ37228.

[55835] FLJ37318 (Accession NP_689799.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ37318 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ37318, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ37318 BINDING SITE, designated SEQ ID:10438, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55836] Another function of GAM7957 is therefore inhibition of FLJ37318 (Accession NP_689799.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ37318.

[55837] FLJ37562 (Accession NP_689622.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ37562 BINDING SITE is a target binding site found in the 3` un-translated region of mRNA encoded by FLJ37562, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ37562 BINDING SITE, designated SEQ ID:11700, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55838] Another function of GAM7957 is therefore inhibition of FLJ37562 (Accession NP_689622.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ37562.

[55839] FLJ38359 (Accession NP_689731.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ38359 BINDING SITE is a target binding site found in the 3` un-

translated region of mRNA encoded by FLJ38359, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ38359 BINDING SITE, designated SEQ ID:10720, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55840] Another function of GAM7957 is therefore inhibition of FLJ38359 (Accession NP_689731.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ38359.

[55841] FLJ38426 (Accession NP_775882.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ38426 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ38426, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ38426 BINDING SITE, designated SEQ ID:11462, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55842] Another function of GAM7957 is therefore inhibition of

FLJ38426 (Accession NP_775882.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ38426.

[55843] FLJ38482 (Accession NP_689894.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ38482 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ38482, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ38482 BINDING SITE, designated SEQ ID:3131, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55844] Another function of GAM7957 is therefore inhibition of FLJ38482 (Accession NP_689894.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ38482.

[55845] FLJ38663 (Accession NP_689482.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ38663 BINDING SITE1 and FLJ38663 BINDING SITE2 are target binding sites found in untranslated regions of mRNA en-

coded by FLJ38663, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ38663 BINDING SITE1 and FLJ38663 BINDING SITE2, designated SEQ ID:19910 and SEQ ID:9420 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55846] Another function of GAM7957 is therefore inhibition of FLJ38663 (Accession NP_689482.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ38663.

[55847] FLJ38690 (Accession NP_848608.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ38690 BINDING SITE1 through FLJ38690 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by FLJ38690, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ38690 BINDING SITE1 through FLJ38690 BINDING SITE3, designated SEQ ID:15308, SEQ ID:1620 and SEQ ID:3523 respectively, to the nucleotide

sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55848] Another function of GAM7957 is therefore inhibition of FLJ38690 (Accession NP_848608.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ38690.

[55849] FLJ38773 (Accession NP_848623.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ38773 BINDING SITE1 through FLJ38773 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by FLJ38773, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ38773 BINDING SITE1 through FLJ38773 BINDING SITE3, designated SEQ ID:18950, SEQ ID:19941 and SEQ ID:7759 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55850] Another function of GAM7957 is therefore inhibition of FLJ38773 (Accession NP_848623.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

FLJ38773.

[55851] FLJ38944 (Accession NP_689574.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ38944 BINDING SITE1 and FLJ38944 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ38944, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ38944 BINDING SITE1 and FLJ38944 BINDING SITE2, designated SEQ ID:1492 and SEQ ID:948 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55852] Another function of GAM7957 is therefore inhibition of FLJ38944 (Accession NP_689574.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ38944.

[55853] FLJ38991 (Accession NP_776188.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ38991 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ38991, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ38991 BINDING SITE, designated SEQ ID:13139, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55854] Another function of GAM7957 is therefore inhibition of FLJ38991 (Accession NP_776188.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ38991.

[55855] FLJ39005 (Accession NP_848616.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ39005 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ39005, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ39005 BINDING SITE, designated SEQ ID:12307, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55856] Another function of GAM7957 is therefore inhibition of FLJ39005 (Accession NP_848616.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment

of diseases and clinical conditions associated with FLJ39005.

[55857] FLJ39369 (Accession NP_689576.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ39369 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ39369, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ39369 BINDING SITE, designated SEQ ID:15223, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55858] Another function of GAM7957 is therefore inhibition of FLJ39369 (Accession NP_689576.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ39369.

[55859] FLJ39415 (Accession NP_775952.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ39415 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ39415, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of FLJ39415 BINDING SITE, designated SEQ ID:14355, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55860] Another function of GAM7957 is therefore inhibition of FLJ39415 (Accession NP_775952.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ39415.

[55861] FLJ39441 (Accession XP_084736.6) is another GAM7957 target gene, herein designated TARGET GENE. FLJ39441 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ39441, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ39441 BINDING SITE, designated SEQ ID:8873, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55862] Another function of GAM7957 is therefore inhibition of FLJ39441 (Accession XP_084736.6) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

FLJ39441.

[55863] FLJ39653 (Accession NP_689897.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ39653 BINDING SITE1 and FLJ39653 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ39653, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ39653 BINDING SITE1 and FLJ39653 BINDING SITE2, designated SEQ ID:13908 and SEQ ID:19119 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55864] Another function of GAM7957 is therefore inhibition of FLJ39653 (Accession NP_689897.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ39653.

[55865] FLJ40160 (Accession NP_775755.2) is another GAM7957 target gene, herein designated TARGET GENE. FLJ40160 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ40160, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ40160 BINDING SITE, designated SEQ ID:15055, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55866] Another function of GAM7957 is therefore inhibition of FLJ40160 (Accession NP_775755.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ40160.

[55867] FLJ40182 (Accession NP_775967.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ40182 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ40182, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ40182 BINDING SITE, designated SEQ ID:9550, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55868] Another function of GAM7957 is therefore inhibition of FLJ40182 (Accession NP_775967.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment

of diseases and clinical conditions associated with FLJ40182.

[55869] FLJ40288 (Accession NP_775953.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ40288 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ40288, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ40288 BINDING SITE, designated SEQ ID:17816, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55870] Another function of GAM7957 is therefore inhibition of FLJ40288 (Accession NP_775953.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ40288.

[55871] FLJ40417 (Accession NP_775921.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ40417 BINDING SITE1 and FLJ40417 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ40417, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III

of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ40417 BINDING SITE1 and FLJ40417 BINDING SITE2, designated SEQ ID:631 and SEQ ID:4629 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55872] Another function of GAM7957 is therefore inhibition of FLJ40417 (Accession NP_775921.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ40417.

[55873] FLJ40542 (Accession NP_848598.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ40542 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ40542, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ40542 BINDING SITE, designated SEQ ID:14572, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55874] Another function of GAM7957 is therefore inhibition of FLJ40542 (Accession NP_848598.1) . Accordingly, utilities

of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ40542.

[55875] FLJ90165 (Accession NP_699169.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ90165 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ90165, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ90165 BINDING SITE, designated SEQ ID:12468, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55876] Another function of GAM7957 is therefore inhibition of FLJ90165 (Accession NP_699169.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ90165.

[55877] FLJ90652 (Accession NP_775889.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ90652 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ90652, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ90652 BINDING SITE, designated SEQ ID:7434, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55878] Another function of GAM7957 is therefore inhibition of FLJ90652 (Accession NP_775889.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ90652.

[55879] FLJ90734 (Accession NP_699206.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ90734 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ90734, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ90734 BINDING SITE, designated SEQ ID:17403, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55880] Another function of GAM7957 is therefore inhibition of FLJ90734 (Accession NP_699206.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment

of diseases and clinical conditions associated with FLJ90734.

[55881] FLJ90798 (Accession NP_699198.1) is another GAM7957 target gene, herein designated TARGET GENE. FLJ90798 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ90798, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ90798 BINDING SITE, designated SEQ ID:19895, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55882] Another function of GAM7957 is therefore inhibition of FLJ90798 (Accession NP_699198.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ90798.

[55883] FRSB (Accession NP_005678.2) is another GAM7957 target gene, herein designated TARGET GENE. FRSB BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FRSB, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the comple-

mentarity of the nucleotide sequences of FRSB BINDING SITE, designated SEQ ID:9067, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55884] Another function of GAM7957 is therefore inhibition of FRSB (Accession NP_005678.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FRSB.

[55885] Fus interacting protein (serine-arginine rich) 1 (FUSIP1, Accession NP_473357.1) is another GAM7957 target gene, herein designated TARGET GENE. FUSIP1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by FUSIP1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FUSIP1 BINDING SITE, designated SEQ ID:14886, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55886] Another function of GAM7957 is therefore inhibition of Fus interacting protein (serine-arginine rich) 1 (FUSIP1, Accession NP_473357.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of

diseases and clinical conditions associated with FUSIP1.

[55887] Fucosyltransferase 6 (alpha (1,3) fucosyltransferase) (FUT6, Accession NP_000141.1) is another GAM7957 target gene, herein designated TARGET GENE. FUT6 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FUT6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FUT6 BINDING SITE, designated SEQ ID:3076, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55888] Another function of GAM7957 is therefore inhibition of Fucosyltransferase 6 (alpha (1,3) fucosyltransferase) (FUT6, Accession NP_000141.1), a gene which is involved in the biosynthesis of the e- selectin ligand, sialyl- lewis x. catalyzes the transfer of fucose from gdp- beta- fucose to alpha- 2,3 sialylated substrates. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FUT6.

[55889] The function of FUT6 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM47.1.Frizzled homolog 2 (drosophila) (FZD2, Accession NP_001457.1) is another GAM7957 target gene, herein designated TARGET GENE. FZD2 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FZD2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FZD2 BINDING SITE, designated SEQ ID:19131, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55890] Another function of GAM7957 is therefore inhibition of Frizzled homolog 2 (drosophila) (FZD2, Accession NP_001457.1), a gene which is a putative receptor with a role in transmembrane signal transmission. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FZD2.

[55891] The function of FZD2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM374.1.Udp-n-acetyl-alpha-d-galactosamine:polypept

ide n-acetylgalactosaminyltransferase 6 (galnac-t6) (GALNT6, Accession NP_009141.1) is another GAM7957 target gene, herein designated TARGET GENE. GALNT6 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GALNT6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GALNT6 BINDING SITE, designated SEQ ID:10435, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55892] Another function of GAM7957 is therefore inhibition of Udp-n-acetyl-alpha-d-galactosamine:polypeptide n-acetylgalactosaminyltransferase 6 (galnac-t6) (GALNT6, Accession NP_009141.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GALNT6.

[55893] Udp-n-acetyl-alpha-d-galactosamine:polypeptide n-acetylgalactosaminyltransferase 7 (galnac-t7) (GALNT7, Accession NP_473451.2) is another GAM7957 target gene, herein designated TARGET GENE. GALNT7 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by GALNT7, cor-

responding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GALNT7 BINDING SITE, designated SEQ ID:17403, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55894] Another function of GAM7957 is therefore inhibition of Udp-n-acetyl-alpha-d-galactosamine:polypeptide n-acetylgalactosaminyltransferase 7 (galnac-t7) (GALNT7, Accession NP_473451.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GALNT7.

[55895] Galactose-1-phosphate uridylyltransferase (GALT, Accession NP_667342.1) is another GAM7957 target gene, herein designated TARGET GENE. GALT BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by GALT, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GALT BINDING SITE, designated SEQ ID:14368, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55896] Another function of GAM7957 is therefore inhibition of Galactose-1-phosphate uridylyltransferase (GALT, Accession NP_667342.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GALT.

[55897] Galactose-1-phosphate uridylyltransferase (GALT, Accession NP_667343.1) is another GAM7957 target gene, herein designated TARGET GENE. GALT BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by GALT, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GALT BINDING SITE, designated SEQ ID:14368, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55898] Another function of GAM7957 is therefore inhibition of Galactose-1-phosphate uridylyltransferase (GALT, Accession NP_667343.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GALT.

[55899] Growth arrest-specific 7 (GAS7, Accession NP_005881.1) is another GAM7957 target gene, herein designated TAR-

GET GENE. GAS7 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by GAS7, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GAS7 BINDING SITE, designated SEQ ID:19102, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55900] Another function of GAM7957 is therefore inhibition of Growth arrest-specific 7 (GAS7, Accession NP_005881.1), a gene which may play a role in promoting maturation and morphological differentiation of cerebellar neurons. and therefore may be associated with Leukemias with myeloid/lymphoid (mll). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Leukemias with myeloid/lymphoid (mll), and of other diseases and clinical conditions associated with GAS7.

[55901] The function of GAS7 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM72.1.GATS (Accession NP_849153.1) is another GAM7957 target gene, herein designated TARGET GENE.

GATS BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by GATS, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GATS BINDING SITE, designated SEQ ID:19105, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55902] Another function of GAM7957 is therefore inhibition of GATS (Accession NP_849153.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GATS.

[55903] GBP4 (Accession NP_443173.2) is another GAM7957 target gene, herein designated TARGET GENE. GBP4 BINDING SITE1 and GBP4 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by GBP4, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GBP4 BINDING SITE1 and GBP4 BINDING SITE2, designated SEQ ID:4182 and SEQ ID:14599 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55904] Another function of GAM7957 is therefore inhibition of GBP4 (Accession NP_443173.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GBP4.

[55905] Glucosaminyl (n-acetyl) transferase 2, i-branching enzyme (GCNT2, Accession NP_001482.1) is another GAM7957 target gene, herein designated TARGET GENE. GCNT2 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by GCNT2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GCNT2 BINDING SITE, designated SEQ ID:9733, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55906] Another function of GAM7957 is therefore inhibition of Glucosaminyl (n-acetyl) transferase 2, i-branching enzyme (GCNT2, Accession NP_001482.1), a gene which converts linear into branched poly- n- acetyllactosaminoglycans. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GCNT2.

[55907] The function of GCNT2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM205.2. Growth differentiation factor 11 (GDF11, Accession NP_005802.1) is another GAM7957 target gene, herein designated TARGET GENE. GDF11 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GDF11, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GDF11 BINDING SITE, designated SEQ ID:5161, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55908] Another function of GAM7957 is therefore inhibition of Growth differentiation factor 11 (GDF11, Accession NP_005802.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GDF11.

[55909] Gamma-glutamyl carboxylase (GGCX, Accession NP_000812.2) is another GAM7957 target gene, herein designated TARGET GENE. GGCX BINDING SITE is a target binding site found in the 3' untranslated region of mRNA

encoded by GGCX, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GGCX BINDING SITE, designated SEQ ID:17049, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55910] Another function of GAM7957 is therefore inhibition of Gamma-glutamyl carboxylase (GGCX, Accession NP_000812.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GGCX.

[55911] GL012 (Accession NP_110441.1) is another GAM7957 target gene, herein designated TARGET GENE. GL012 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GL012, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GL012 BINDING SITE, designated SEQ ID:1572, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55912] Another function of GAM7957 is therefore inhibition of

GL012 (Accession NP_110441.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GL012.

[55913] GLTP (Accession NP_057517.1) is another GAM7957 target gene, herein designated TARGET GENE. GLTP BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GLTP, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GLTP BINDING SITE, designated SEQ ID:17424, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55914] Another function of GAM7957 is therefore inhibition of GLTP (Accession NP_057517.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GLTP.

[55915] GNB4 (Accession NP_067642.1) is another GAM7957 target gene, herein designated TARGET GENE. GNB4 BINDING SITE1 and GNB4 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by GNB4, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4

illustrates the complementarity of the nucleotide sequences of GNB4 BINDING SITE1 and GNB4 BINDING SITE2, designated SEQ ID:10438 and SEQ ID:16402 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55916] Another function of GAM7957 is therefore inhibition of GNB4 (Accession NP_067642.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GNB4.

[55917] GNE (Accession NP_005467.1) is another GAM7957 target gene, herein designated TARGET GENE. GNE BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GNE, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GNE BINDING SITE, designated SEQ ID:15108, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55918] Another function of GAM7957 is therefore inhibition of GNE (Accession NP_005467.1), a gene which has roles in sialic acid biosynthesis and regulates cell surface sialylation. Accordingly, utilities of GAM7957 include diagnosis,

prevention and treatment of diseases and clinical conditions associated with GNE.

[55919] The function of GNE and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1. Guanine nucleotide binding protein (g protein), gamma 11 (GNG11, Accession NP_004117.1) is another GAM7957 target gene, herein designated TARGET GENE. GNG11 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by GNG11, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GNG11 BINDING SITE, designated SEQ ID:2988, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55920] Another function of GAM7957 is therefore inhibition of Guanine nucleotide binding protein (g protein), gamma 11 (GNG11, Accession NP_004117.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GNG11.

[55921] GNPAT1 (Accession XP_085119.1) is another GAM7957

target gene, herein designated TARGET GENE. GNPAT1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GNPAT1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GNPAT1 BINDING SITE, designated SEQ ID:17400, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55922] Another function of GAM7957 is therefore inhibition of GNPAT1 (Accession XP_085119.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GNPAT1.

[55923] Golgi autoantigen, golgin subfamily a, 2 (GOLGA2, Accession NP_004477.2) is another GAM7957 target gene, herein designated TARGET GENE. GOLGA2 BINDING SITE1 and GOLGA2 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by GOLGA2, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GOLGA2 BINDING SITE1 and GOLGA2 BINDING

SITE2, designated SEQ ID:5830 and SEQ ID:6239 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55924] Another function of GAM7957 is therefore inhibition of Golgi autoantigen, golgin subfamily a, 2 (GOLGA2, Accession NP_004477.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GOLGA2.

[55925] GOLGIN-67 (Accession NP_851421.1) is another GAM7957 target gene, herein designated TARGET GENE. GOLGIN-67 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by GOLGIN-67, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GOLGIN-67 BINDING SITE, designated SEQ ID:9854, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55926] Another function of GAM7957 is therefore inhibition of GOLGIN-67 (Accession NP_851421.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

GOLGIN-67.

[55927] Glycoprotein 2 (zymogen granule membrane) (GP2, Accession NP_001493.1) is another GAM7957 target gene, herein designated TARGET GENE. GP2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GP2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GP2 BINDING SITE, designated SEQ ID:3379, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55928] Another function of GAM7957 is therefore inhibition of Glycoprotein 2 (zymogen granule membrane) (GP2, Accession NP_001493.1), a gene which expresses in the secretory granule of the exocrine pancreas. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GP2.

[55929] The function of GP2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM347.1. Glycoprotein v (platelet) (GP5, Accession

NP_004479.1) is another GAM7957 target gene, herein designated TARGET GENE. GP5 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GP5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GP5 BINDING SITE, designated SEQ ID:9421, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55930] Another function of GAM7957 is therefore inhibition of Glycoprotein v (platelet) (GP5, Accession NP_004479.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GP5.

[55931] Glycoprotein a33 (transmembrane) (GPA33, Accession NP_005805.1) is another GAM7957 target gene, herein designated TARGET GENE. GPA33 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by GPA33, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GPA33 BINDING SITE, designated

SEQ ID:16908, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55932] Another function of GAM7957 is therefore inhibition of Glycoprotein a33 (transmembrane) (GPA33, Accession NP_005805.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GPA33.

[55933] G protein-coupled receptor 1 (GPR1, Accession NP_005270.1) is another GAM7957 target gene, herein designated TARGET GENE. GPR1 BINDING SITE1 and GPR1 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by GPR1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GPR1 BINDING SITE1 and GPR1 BINDING SITE2, designated SEQ ID:10434 and SEQ ID:2031 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55934] Another function of GAM7957 is therefore inhibition of G protein-coupled receptor 1 (GPR1, Accession NP_005270.1), a gene which is an orphan receptor. Ac-

cordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GPR1.

[55935] The function of GPR1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM207.2.GRAF (Accession NP_055886.1) is another GAM7957 target gene, herein designated TARGET GENE. GRAF BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GRAF, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GRAF BINDING SITE, designated SEQ ID:14162, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55936] Another function of GAM7957 is therefore inhibition of GRAF (Accession NP_055886.1), a gene which is a GTPase activating protein for p21- rac and therefore may be associated with Juvenile myelomonocytic leukemia. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Juvenile myelomonocytic leukemia, and of other diseases and clinical conditions associated with

GRAF.

[55937] The function of GRAF and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1.GREB1 (Accession NP_683701.1) is another GAM7957 target gene, herein designated TARGET GENE. GREB1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by GREB1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GREB1 BINDING SITE, designated SEQ ID:13343, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55938] Another function of GAM7957 is therefore inhibition of GREB1 (Accession NP_683701.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GREB1.

[55939] Glutamate receptor, metabotropic 6 (GRM6, Accession NP_000834.1) is another GAM7957 target gene, herein designated TARGET GENE. GRM6 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA

encoded by GRM6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GRM6 BINDING SITE, designated SEQ ID:9275, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55940] Another function of GAM7957 is therefore inhibition of Glutamate receptor, metabotropic 6 (GRM6, Accession NP_000834.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GRM6.

[55941] GRTP1 (Accession NP_078995.1) is another GAM7957 target gene, herein designated TARGET GENE. GRTP1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GRTP1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GRTP1 BINDING SITE, designated SEQ ID:18691, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55942] Another function of GAM7957 is therefore inhibition of

GRTP1 (Accession NP_078995.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GRTP1.

[55943] GSG2 (Accession NP_114171.1) is another GAM7957 target gene, herein designated TARGET GENE. GSG2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GSG2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GSG2 BINDING SITE, designated SEQ ID:19193, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55944] Another function of GAM7957 is therefore inhibition of GSG2 (Accession NP_114171.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GSG2.

[55945] General transcription factor iif, polypeptide 1, 74kda (GTF2F1, Accession NP_002087.1) is another GAM7957 target gene, herein designated TARGET GENE. GTF2F1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GTF2F1, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GTF2F1 BINDING SITE, designated SEQ ID:13402, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55946] Another function of GAM7957 is therefore inhibition of General transcription factor iif, polypeptide 1, 74kda (GTF2F1, Accession NP_002087.1), a gene which helps to recruit it to the initiation complex in collaboration with tfliib. it promotes transcription elongation. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GTF2F1.

[55947] The function of GTF2F1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM223.1.Gtp binding protein 5 (putative) (GTPBP5, Accession NP_056481.1) is another GAM7957 target gene, herein designated TARGET GENE. GTPBP5 BINDING SITE1 through GTPBP5 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by GTPBP5, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GTPBP5 BINDING SITE1 through GTPBP5 BINDING SITE3, designated SEQ ID:2483, SEQ ID:12059 and SEQ ID:15564 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55948] Another function of GAM7957 is therefore inhibition of Gtp binding protein 5 (putative) (GTPBP5, Accession NP_056481.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GTPBP5.

[55949] Granzyme h (cathepsin g-like 2, protein h-ccpx) (GZMH, Accession NP_219491.1) is another GAM7957 target gene, herein designated TARGET GENE. GZMH BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GZMH, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GZMH BINDING SITE, designated SEQ ID:6446, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55950] Another function of GAM7957 is therefore inhibition of

Granzyme h (cathepsin g-like 2, protein h-ccpx) (GZMH, Accession NP_219491.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GZMH.

[55951] H2-ALPHA (Accession XP_054284.3) is another GAM7957 target gene, herein designated TARGET GENE. H2-ALPHA BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by H2-ALPHA, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of H2-ALPHA BINDING SITE, designated SEQ ID:15749, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55952] Another function of GAM7957 is therefore inhibition of H2-ALPHA (Accession XP_054284.3) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with H2-ALPHA.

[55953] H2a histone family, member x (H2AFX, Accession NP_002096.1) is another GAM7957 target gene, herein designated TARGET GENE. H2AFX BINDING SITE is a target binding site found in the 3' untranslated region of mRNA

encoded by H2AFX, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of H2AFX BINDING SITE, designated SEQ ID:2926, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55954] Another function of GAM7957 is therefore inhibition of H2a histone family, member x (H2AFX, Accession NP_002096.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with H2AFX.

[55955] Hbs1-like (*s. cerevisiae*) (HBS1L, Accession NP_006611.1) is another GAM7957 target gene, herein designated TARGET GENE. HBS1L BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HBS1L, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HBS1L BINDING SITE, designated SEQ ID:12190, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55956] Another function of GAM7957 is therefore inhibition of Hbs1-like (*s. cerevisiae*) (HBS1L, Accession NP_006611.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HBS1L.

[55957] HCGIX (Accession NP_005835.2) is another GAM7957 target gene, herein designated TARGET GENE. HCGIX BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HCGIX, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HCGIX BINDING SITE, designated SEQ ID:641, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55958] Another function of GAM7957 is therefore inhibition of HCGIX (Accession NP_005835.2). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HCGIX.

[55959] HCNGP (Accession NP_037392.1) is another GAM7957 target gene, herein designated TARGET GENE. HCNGP BINDING SITE1 and HCNGP BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded

by HCNGP, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HCNGP BINDING SITE1 and HCNGP BINDING SITE2, designated SEQ ID:15274 and SEQ ID:20026 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55960] Another function of GAM7957 is therefore inhibition of HCNGP (Accession NP_037392.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HCNGP.

[55961] HEMK (Accession NP_057257.1) is another GAM7957 target gene, herein designated TARGET GENE. HEMK BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HEMK, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HEMK BINDING SITE, designated SEQ ID:9386, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55962] Another function of GAM7957 is therefore inhibition of

HEMK (Accession NP_057257.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HEMK.

[55963] HES2 (Accession XP_290879.1) is another GAM7957 target gene, herein designated TARGET GENE. HES2 BINDING SITE1 through HES2 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by HES2, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HES2 BINDING SITE1 through HES2 BINDING SITE3, designated SEQ ID:19032, SEQ ID:5827 and SEQ ID:15984 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55964] Another function of GAM7957 is therefore inhibition of HES2 (Accession XP_290879.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HES2.

[55965] Hairy and enhancer of split 6 (drosophila) (HES6, Accession NP_061115.2) is another GAM7957 target gene, herein designated TARGET GENE. HES6 BINDING SITE is a target binding site found in the 3' untranslated region of

mRNA encoded by HES6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HES6 BINDING SITE, designated SEQ ID:2945, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55966] Another function of GAM7957 is therefore inhibition of Hairy and enhancer of split 6 (drosophila) (HES6, Accession NP_061115.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HES6.

[55967] Herv-h ltr-associating 2 (HHLA2, Accession NP_009003.1) is another GAM7957 target gene, herein designated TARGET GENE. HHLA2 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by HHLA2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HHLA2 BINDING SITE, designated SEQ ID:5686, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55968] Another function of GAM7957 is therefore inhibition of Herv-h Itr-associating 2 (HHLA2, Accession NP_009003.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HHLA2.

[55969] HIC (Accession XP_041273.1) is another GAM7957 target gene, herein designated TARGET GENE. HIC BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HIC, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HIC BINDING SITE, designated SEQ ID:19869, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55970] Another function of GAM7957 is therefore inhibition of HIC (Accession XP_041273.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HIC.

[55971] HIG2 (Accession NP_037464.1) is another GAM7957 target gene, herein designated TARGET GENE. HIG2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HIG2, corresponding to a target

binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HIG2 BINDING SITE, designated SEQ ID:2455, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55972] Another function of GAM7957 is therefore inhibition of HIG2 (Accession NP_037464.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HIG2.

[55973] Huntingtin interacting protein 1 (HIP1, Accession NP_005329.2) is another GAM7957 target gene, herein designated TARGET GENE. HIP1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HIP1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HIP1 BINDING SITE, designated SEQ ID:19132, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55974] Another function of GAM7957 is therefore inhibition of Huntingtin interacting protein 1 (HIP1, Accession

NP_005329.2), a gene which is a membrane protein and interacts with huntingtin. and therefore may be associated with Huntington disease. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Huntington disease, and of other diseases and clinical conditions associated with HIP1.

[55975] The function of HIP1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM72.1. Histocompatibility (minor) 13 (HM13, Accession NP_848697.1) is another GAM7957 target gene, herein designated TARGET GENE. HM13 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by HM13, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HM13 BINDING SITE, designated SEQ ID:18691, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55976] Another function of GAM7957 is therefore inhibition of Histocompatibility (minor) 13 (HM13, Accession NP_848697.1) . Accordingly, utilities of GAM7957 include

diagnosis, prevention and treatment of diseases and clinical conditions associated with HM13.

[55977] High mobility group at-hook 2 (HMGA2, Accession NP_003474.1) is another GAM7957 target gene, herein designated TARGET GENE. HMGA2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HMGA2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HMGA2 BINDING SITE, designated SEQ ID:3859, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55978] Another function of GAM7957 is therefore inhibition of High mobility group at-hook 2 (HMGA2, Accession NP_003474.1), a gene which may affect transcription and cell differentiation; shares common DNA-binding motif with other HMG HMG I/Y family members. and therefore may be associated with Lipoma. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Lipoma, and of other diseases and clinical conditions associated with HMGA2.

[55979] The function of HMGA2 and its association with various

diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM203.1. Histamine receptor h1 (HRH1, Accession NP_000852.1) is another GAM7957 target gene, herein designated TARGET GENE. HRH1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HRH1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HRH1 BINDING SITE, designated SEQ ID:15027, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55980] Another function of GAM7957 is therefore inhibition of Histamine receptor h1 (HRH1, Accession NP_000852.1), a gene which stimulates the synthesis of inositol phosphate. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HRH1.

[55981] The function of HRH1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM47.1. Histamine receptor h4 (HRH4, Accession

NP_067637.2) is another GAM7957 target gene, herein designated TARGET GENE. HRH4 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HRH4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HRH4 BINDING SITE, designated SEQ ID:16196, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55982] Another function of GAM7957 is therefore inhibition of Histamine receptor h4 (HRH4, Accession NP_067637.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HRH4.

[55983] Hydroxysteroid (17-beta) dehydrogenase 7 (HSD17B7, Accession NP_057455.1) is another GAM7957 target gene, herein designated TARGET GENE. HSD17B7 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HSD17B7, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HSD17B7

BINDING SITE, designated SEQ ID:16464, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55984] Another function of GAM7957 is therefore inhibition of Hydroxysteroid (17- β) dehydrogenase 7 (HSD17B7, Accession NP_057455.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HSD17B7.

[55985] HSH2 (Accession NP_116244.1) is another GAM7957 target gene, herein designated TARGET GENE. HSH2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HSH2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HSH2 BINDING SITE, designated SEQ ID:10438, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55986] Another function of GAM7957 is therefore inhibition of HSH2 (Accession NP_116244.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HSH2.

[55987] HSMPP8 (Accession XP_167894.1) is another GAM7957

target gene, herein designated TARGET GENE. HSMPP8 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HSMPP8, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HSMPP8 BINDING SITE, designated SEQ ID:4558, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55988] Another function of GAM7957 is therefore inhibition of HSMPP8 (Accession XP_167894.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HSMPP8.

[55989] Heat shock 70kda protein 5 (glucose-regulated protein, 78kda) (HSPA5, Accession NP_005338.1) is another GAM7957 target gene, herein designated TARGET GENE. HSPA5 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HSPA5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HSPA5 BINDING SITE, designated SEQ ID:10438, to the

nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55990] Another function of GAM7957 is therefore inhibition of Heat shock 70kda protein 5 (glucose-regulated protein, 78kda) (HSPA5, Accession NP_005338.1), a gene which is involved in the folding and assembly of proteins in the endoplasmic reticulum (ER). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HSPA5.

[55991] The function of HSPA5 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM72.1.HSPC043 (Accession NP_067041.1) is another GAM7957 target gene, herein designated TARGET GENE. HSPC043 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HSPC043, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HSPC043 BINDING SITE, designated SEQ ID:12141, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55992] Another function of GAM7957 is therefore inhibition of

HSPC043 (Accession NP_067041.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HSPC043.

[55993] Hormonally upregulated neu-associated kinase (HUNK, Accession NP_055401.1) is another GAM7957 target gene, herein designated TARGET GENE. HUNK BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HUNK, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HUNK BINDING SITE, designated SEQ ID:2603, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55994] Another function of GAM7957 is therefore inhibition of Hormonally upregulated neu-associated kinase (HUNK, Accession NP_055401.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HUNK.

[55995] HYPK (Accession NP_057484.3) is another GAM7957 target gene, herein designated TARGET GENE. HYPK BINDING SITE is a target binding site found in the 3' untranslated

region of mRNA encoded by HYPK, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HYPK BINDING SITE, designated SEQ ID:9495, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55996] Another function of GAM7957 is therefore inhibition of HYPK (Accession NP_057484.3) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HYPK.

[55997] Islet amyloid polypeptide (IAPP, Accession NP_000406.1) is another GAM7957 target gene, herein designated TARGET GENE. IAPP BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by IAPP, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IAPP BINDING SITE, designated SEQ ID:19057, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[55998] Another function of GAM7957 is therefore inhibition of Islet amyloid polypeptide (IAPP, Accession NP_000406.1),

a gene which selectively inhibits insulin- stimulated glucose utilization and glycogen deposition and therefore may be associated with Type ii diabetes . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Type ii diabetes ., and of other diseases and clinical conditions associated with IAPP.

[55999] The function of IAPP and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM190.1. Interferon-induced protein with tetratricopeptide repeats 4 (IFIT4, Accession NP_001540.2) is another GAM7957 target gene, herein designated TARGET GENE. IFIT4 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by IFIT4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IFIT4 BINDING SITE, designated SEQ ID:3297, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56000] Another function of GAM7957 is therefore inhibition of Interferon-induced protein with tetratricopeptide repeats 4 (IFIT4, Accession NP_001540.2), a gene which is an in-

terferon- induced protein. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with IFIT4.

[56001] The function of IFIT4 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM347.1. Interferon (alpha, beta and omega) receptor 1 (IFNAR1, Accession NP_000620.1) is another GAM7957 target gene, herein designated TARGET GENE. IFNAR1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by IFNAR1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IFNAR1 BINDING SITE, designated SEQ ID:7044, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56002] Another function of GAM7957 is therefore inhibition of Interferon (alpha, beta and omega) receptor 1 (IFNAR1, Accession NP_000620.1), a gene which is a receptor for interferons alpha and beta. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with IFNAR1.

[56003] The function of IFNAR1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM347.1. Interferon gamma receptor 2 (interferon gamma transducer 1) (IFNGR2, Accession NP_005525.1) is another GAM7957 target gene, herein designated TARGET GENE. IFNGR2 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by IFNGR2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IFNGR2 BINDING SITE, designated SEQ ID:17119, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56004] Another function of GAM7957 is therefore inhibition of Interferon gamma receptor 2 (interferon gamma transducer 1) (IFNGR2, Accession NP_005525.1), a gene which is required for signal transduction. this accessory factor is an integral part of the ifn- gamma signal transduction pathway and is likely to interact with gaf, jak1, and/or jak2. and therefore may be associated with Atypical mycobacterial infection, familial disseminated. Accordingly,

utilities of GAM7957 include diagnosis, prevention and treatment of Atypical mycobacterial infection, familial disseminated, and of other diseases and clinical conditions associated with IFNGR2.

[56005] The function of IFNGR2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM347.1. Inositol hexaphosphate kinase 3 (IHPK3, Accession NP_473452.1) is another GAM7957 target gene, herein designated TARGET GENE. IHPK3 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by IHPK3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IHPK3 BINDING SITE, designated SEQ ID:18598, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56006] Another function of GAM7957 is therefore inhibition of Inositol hexaphosphate kinase 3 (IHPK3, Accession NP_473452.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with IHPK3.

[56007] Interleukin 10 (IL10, Accession NP_000563.1) is another GAM7957 target gene, herein designated TARGET GENE. IL10 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by IL10, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IL10 BINDING SITE, designated SEQ ID:8482, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56008] Another function of GAM7957 is therefore inhibition of Interleukin 10 (IL10, Accession NP_000563.1), a gene which inhibits the synthesis of a number of cytokines, including ifn- gamma, il- 2, il- 3, tnf and gm- csf produced by activated macrophages and by helper t cells. and therefore may be associated with Human immunodeficiency virus type 1, susceptibility to. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Human immunodeficiency virus type 1, susceptibility to, and of other diseases and clinical conditions associated with IL10.

[56009] The function of IL10 and its association with various diseases and clinical conditions, has been established by

previous studies, as described hereinabove with reference to GAM347.2. Interleukin 10 receptor, beta (IL10RB, Accession NP_000619.3) is another GAM7957 target gene, herein designated TARGET GENE. IL10RB BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by IL10RB, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IL10RB BINDING SITE, designated SEQ ID:18976, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56010] Another function of GAM7957 is therefore inhibition of Interleukin 10 receptor, beta (IL10RB, Accession NP_000619.3) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with IL10RB.

[56011] Interleukin 13 receptor, alpha 1 (IL13RA1, Accession NP_001551.1) is another GAM7957 target gene, herein designated TARGET GENE. IL13RA1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by IL13RA1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or

BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IL13RA1 BINDING SITE, designated SEQ ID:11740, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56012] Another function of GAM7957 is therefore inhibition of Interleukin 13 receptor, alpha 1 (IL13RA1, Accession NP_001551.1), a gene which binds il- 13 with a low affinity. together with il- 4r- alpha can form a functional receptor for il- 13 and therefore may be associated with Asthma and athopy. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Asthma and athopy, and of other diseases and clinical conditions associated with IL13RA1.

[56013] The function of IL13RA1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM72.1. Interleukin 17 receptor (IL17R, Accession NP_055154.3) is another GAM7957 target gene, herein designated TARGET GENE. IL17R BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by IL17R, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III

of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IL17R BINDING SITE, designated SEQ ID:11720, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56014] Another function of GAM7957 is therefore inhibition of Interleukin 17 receptor (IL17R, Accession NP_055154.3) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with IL17R.

[56015] Interleukin 18 (interferon-gamma-inducing factor) (IL18, Accession NP_001553.1) is another GAM7957 target gene, herein designated TARGET GENE. IL18 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by IL18, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IL18 BINDING SITE, designated SEQ ID:9399, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56016] Another function of GAM7957 is therefore inhibition of Interleukin 18 (interferon-gamma-inducing factor) (IL18,

Accession NP_001553.1), a gene which augments natural killer cell activity in spleen cells and stimulates interferon gamma production in t helper type i cells. and therefore may be associated with Crohn disease. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Crohn disease, and of other diseases and clinical conditions associated with IL18.

[56017] The function of IL18 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM72.1. Interleukin 1 receptor, type i (IL1R1, Accession NP_000868.1) is another GAM7957 target gene, herein designated TARGET GENE. IL1R1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by IL1R1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IL1R1 BINDING SITE, designated SEQ ID:10406, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56018] Another function of GAM7957 is therefore inhibition of Interleukin 1 receptor, type i (IL1R1, Accession

NP_000868.1), a gene which is a receptor for interleukin-1 alpha (il-1a), beta (il-1b), and interleukin-1 receptor antagonist protein (il-1ra). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with IL1R1.

[56019] The function of IL1R1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM40.1. IL23R (Accession NP_653302.2) is another GAM7957 target gene, herein designated TARGET GENE. IL23R BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by IL23R, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IL23R BINDING SITE, designated SEQ ID:9056, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56020] Another function of GAM7957 is therefore inhibition of IL23R (Accession NP_653302.2). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with IL23R.

[56021] Interleukin 28 receptor, alpha (IL28RA, Accession

NP_775087.1) is another GAM7957 target gene, herein designated TARGET GENE. IL28RA BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by IL28RA, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IL28RA BINDING SITE, designated SEQ ID:15436, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56022] Another function of GAM7957 is therefore inhibition of Interleukin 28 receptor, alpha (IL28RA, Accession NP_775087.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with IL28RA.

[56023] Interleukin 28 receptor, alpha (IL28RA, Accession NP_734464.1) is another GAM7957 target gene, herein designated TARGET GENE. IL28RA BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by IL28RA, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

IL28RA BINDING SITE, designated SEQ ID:15436, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56024] Another function of GAM7957 is therefore inhibition of Interleukin 28 receptor, alpha (IL28RA, Accession NP_734464.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with IL28RA.

[56025] Interleukin 28 receptor, alpha (IL28RA, Accession NP_775088.1) is another GAM7957 target gene, herein designated TARGET GENE. IL28RA BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by IL28RA, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IL28RA BINDING SITE, designated SEQ ID:15436, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56026] Another function of GAM7957 is therefore inhibition of Interleukin 28 receptor, alpha (IL28RA, Accession NP_775088.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical

cal conditions associated with IL28RA.

[56027] Interleukin 6 receptor (IL6R, Accession NP_852004.1) is another GAM7957 target gene, herein designated TARGET GENE. IL6R BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by IL6R, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IL6R BINDING SITE, designated SEQ ID:17754, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56028] Another function of GAM7957 is therefore inhibition of Interleukin 6 receptor (IL6R, Accession NP_852004.1), a gene which is essential to the regulation of the immune response, hematopoiesis, and acute- phase reactions. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with IL6R.

[56029] The function of IL6R and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM94.1. Interleukin 6 receptor (IL6R, Accession

NP_000556.1) is another GAM7957 target gene, herein designated TARGET GENE. IL6R BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by IL6R, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IL6R BINDING SITE, designated SEQ ID:17754, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56030] Another function of GAM7957 is therefore inhibition of Interleukin 6 receptor (IL6R, Accession NP_000556.1), a gene which is essential to the regulation of the immune response, hematopoiesis, and acute-phase reactions. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with IL6R.

[56031] The function of IL6R and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM94.1. Interleukin 8 receptor, beta (IL8RB, Accession NP_001548.1) is another GAM7957 target gene, herein designated TARGET GENE. IL8RB BINDING SITE is a target

binding site found in the 3' untranslated region of mRNA encoded by IL8RB, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IL8RB BINDING SITE, designated SEQ ID:10438, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56032] Another function of GAM7957 is therefore inhibition of Interleukin 8 receptor, beta (IL8RB, Accession NP_001548.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with IL8RB.

[56033] Inactivation escape 1 (INE1, Accession NP_003660.1) is another GAM7957 target gene, herein designated TARGET GENE. INE1 BINDING SITE1 and INE1 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by INE1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of INE1 BINDING SITE1 and INE1 BINDING SITE2, designated SEQ ID:18648 and SEQ ID:13712 respectively, to the nucleotide sequence of

GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56034] Another function of GAM7957 is therefore inhibition of Inactivation escape 1 (INE1, Accession NP_003660.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with INE1.

[56035] Inhibitor of growth family, member 2 (ING2, Accession NP_477519.1) is another GAM7957 target gene, herein designated TARGET GENE. ING2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ING2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ING2 BINDING SITE, designated SEQ ID:13415, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56036] Another function of GAM7957 is therefore inhibition of Inhibitor of growth family, member 2 (ING2, Accession NP_477519.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ING2.

[56037] Inhibin, beta c (INHBC, Accession NP_005529.1) is another GAM7957 target gene, herein designated TARGET GENE. INHBC BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by INHBC, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of INHBC BINDING SITE, designated SEQ ID:16412, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56038] Another function of GAM7957 is therefore inhibition of Inhibin, beta c (INHBC, Accession NP_005529.1), a gene which inhibits the secretion of follitropin by the pituitary gland. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with INHBC.

[56039] The function of INHBC and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM401.1. Inositol polyphosphate-5-phosphatase, 75kda (INPP5B, Accession XP_300739.1) is another GAM7957 target gene, herein designated TARGET GENE. INPP5B BINDING SITE1 and INPP5B BINDING SITE2 are tar-

get binding sites found in untranslated regions of mRNA encoded by INPP5B, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of INPP5B BINDING SITE1 and INPP5B BINDING SITE2, designated SEQ ID:16413 and SEQ ID:12792 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56040] Another function of GAM7957 is therefore inhibition of Inositol polyphosphate-5-phosphatase, 75kda (INPP5B, Accession XP_300739.1), a gene which hydrolyzes the calcium- mobilizing second messenger $\text{ins}(1,4,5)\text{p3}$. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with INPP5B.

[56041] The function of INPP5B and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM347.1. Inositol polyphosphate-5-phosphatase, 145kda (INPP5D, Accession NP_005532.1) is another GAM7957 target gene, herein designated TARGET GENE. INPP5D BINDING SITE is a target binding site found in the

5' untranslated region of mRNA encoded by INPP5D, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of INPP5D BINDING SITE, designated SEQ ID:9965, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56042] Another function of GAM7957 is therefore inhibition of Inositol polyphosphate-5-phosphatase, 145kda (INPP5D, Accession NP_005532.1), a gene which hydrolyzes Ins(1,3,4,5)P₄ and PtdIns(3,4,5)P₃; contains an SH2- domain and therefore may be associated with Severe osteoporosis. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Severe osteoporosis, and of other diseases and clinical conditions associated with INPP5D.

[56043] The function of INPP5D and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM347.1. Intracisternal a particle-promoted polypeptide (IPP, Accession NP_005888.1) is another GAM7957 target gene, herein designated TARGET GENE. IPP BINDING SITE1 and IPP BINDING SITE2 are target binding sites

found in untranslated regions of mRNA encoded by IPP, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IPP BINDING SITE1 and IPP BINDING SITE2, designated SEQ ID:7118 and SEQ ID:11184 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

- [56044] Another function of GAM7957 is therefore inhibition of Intracisternal a particle-promoted polypeptide (IPP, Accession NP_005888.1), a gene which may play a role in organizing the actin cytoskeleton. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with IPP.
- [56045] The function of IPP and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM72.1. Interleukin-1 receptor-associated kinase 1 (IRAK1, Accession NP_001560.1) is another GAM7957 target gene, herein designated TARGET GENE. IRAK1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by IRAK1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE

II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IRAK1 BINDING SITE, designated SEQ ID:12737, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56046] Another function of GAM7957 is therefore inhibition of Interleukin-1 receptor-associated kinase 1 (IRAK1, Accession NP_001560.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with IRAK1.

[56047] Interleukin-1 receptor-associated kinase 4 (IRAK4, Accession NP_057207.1) is another GAM7957 target gene, herein designated TARGET GENE. IRAK4 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by IRAK4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IRAK4 BINDING SITE, designated SEQ ID:10607, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56048] Another function of GAM7957 is therefore inhibition of Interleukin-1 receptor-associated kinase 4 (IRAK4, Acces-

sion NP_057207.1), a gene which may function as an IRAK1 kinase, triggering a cascade of phosphorylation events. and therefore may be associated with Renal tumors. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Renal tumors, and of other diseases and clinical conditions associated with IRAK4.

[56049] The function of IRAK4 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM72.1. Integrin, alpha d (ITGAD, Accession XP_113880.1) is another GAM7957 target gene, herein designated TARGET GENE. ITGAD BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ITGAD, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ITGAD BINDING SITE, designated SEQ ID:5341, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56050] Another function of GAM7957 is therefore inhibition of Integrin, alpha d (ITGAD, Accession XP_113880.1) . Ac-

cordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ITGAD.

[56051] Integrin, alpha I (antigen cd11a (p180), lymphocyte function-associated antigen 1; alpha polypeptide) (ITGAL, Accession NP_002200.1) is another GAM7957 target gene, herein designated TARGET GENE. ITGAL BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ITGAL, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ITGAL BINDING SITE, designated SEQ ID:15224, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56052] Another function of GAM7957 is therefore inhibition of Integrin, alpha I (antigen cd11a (p180), lymphocyte function-associated antigen 1; alpha polypeptide) (ITGAL, Accession NP_002200.1), a gene which is a receptor for icam1, icam2, icam3 and icam4. it is involved in a variety of immune phenomena including leukocyte- endothelial cell interaction, cytotoxic t- cell mediated killing, and antibody dependent killing by granulocytes and monocytes.

Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ITGAL.

[56053] The function of ITGAL and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM148.1.Junctophilin 2 (JPH2, Accession NP_065166.2) is another GAM7957 target gene, herein designated TARGET GENE. JPH2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by JPH2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of JPH2 BINDING SITE, designated SEQ ID:7268, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56054] Another function of GAM7957 is therefore inhibition of Junctophilin 2 (JPH2, Accession NP_065166.2), a gene which mediates cross talk between cell surface and intracellular ion channels. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with JPH2.

[56055] The function of JPH2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM346.2.Kangai 1 (suppression of tumorigenicity 6, prostate; cd82 antigen (r2 leukocyte antigen, antigen detected by monoclonal and antibody ia4)) (KAI1, Accession NP_002222.1) is another GAM7957 target gene, herein designated TARGET GENE. KAI1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KAI1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KAI1 BINDING SITE, designated SEQ ID:4535, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56056] Another function of GAM7957 is therefore inhibition of Kangai 1 (suppression of tumorigenicity 6, prostate; cd82 antigen (r2 leukocyte antigen, antigen detected by monoclonal and antibody ia4)) (KAI1, Accession NP_002222.1), a gene which associates with cd4 or cd8 and delivers costimulatory signals for the tcr/cd3 pathway. and therefore may be associated with Prostate cancer. Accordingly, utili-

ties of GAM7957 include diagnosis, prevention and treatment of Prostate cancer, and of other diseases and clinical conditions associated with KAI1.

[56057] The function of KAI1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM347.1.KBRAS2 (Accession NP_060065.2) is another GAM7957 target gene, herein designated TARGET GENE. KBRAS2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KBRAS2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KBRAS2 BINDING SITE, designated SEQ ID:3310, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56058] Another function of GAM7957 is therefore inhibition of KBRAS2 (Accession NP_060065.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KBRAS2.

[56059] Potassium voltage-gated channel, shaker-related subfamily, member 7 (KCNA7, Accession NP_114092.2) is another GAM7957 target gene, herein designated TARGET

GENE. KCNA7 BINDING SITE1 and KCNA7 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by KCNA7, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KCNA7 BINDING SITE1 and KCNA7 BINDING SITE2, designated SEQ ID:15108 and SEQ ID:2483 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56060] Another function of GAM7957 is therefore inhibition of Potassium voltage-gated channel, shaker-related subfamily, member 7 (KCNA7, Accession NP_114092.2), a gene which allows nerve cells to efficiently repolarize following an action potential. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KCNA7.

[56061] The function of KCNA7 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM72.1. Potassium voltage-gated channel, subfamily h (eag-related), member 6 (KCNH6, Accession NP_110406.1) is another GAM7957 target gene, herein

designated TARGET GENE. KCNH6 BINDING SITE1 and KCNH6 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by KCNH6, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KCNH6 BINDING SITE1 and KCNH6 BINDING SITE2, designated SEQ ID:19242 and SEQ ID:18166 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56062] Another function of GAM7957 is therefore inhibition of Potassium voltage-gated channel, subfamily h (eag-related), member 6 (KCNH6, Accession NP_110406.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KCNH6.

[56063] Kv channel interacting protein 2 (KCNIP2, Accession NP_775286.1) is another GAM7957 target gene, herein designated TARGET GENE. KCNIP2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by KCNIP2, corresponding to a target binding site such as BINDING SITE I, BIND-

ING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KCNIP2 BINDING SITE, designated SEQ ID:14673, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56064] Another function of GAM7957 is therefore inhibition of Kv channel interacting protein 2 (KCNIP2, Accession NP_775286.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KCNIP2.

[56065] Kv channel interacting protein 2 (KCNIP2, Accession NP_775284.1) is another GAM7957 target gene, herein designated TARGET GENE. KCNIP2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by KCNIP2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KCNIP2 BINDING SITE, designated SEQ ID:14673, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56066] Another function of GAM7957 is therefore inhibition of Kv channel interacting protein 2 (KCNIP2, Accession NP_775284.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KCNIP2.

[56067] Kv channel interacting protein 2 (KCNIP2, Accession NP_775464.1) is another GAM7957 target gene, herein designated TARGET GENE. KCNIP2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by KCNIP2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KCNIP2 BINDING SITE, designated SEQ ID:14673, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56068] Another function of GAM7957 is therefore inhibition of Kv channel interacting protein 2 (KCNIP2, Accession NP_775464.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KCNIP2.

[56069] Kv channel interacting protein 2 (KCNIP2, Accession NP_775285.1) is another GAM7957 target gene, herein

designated TARGET GENE. KCNIP2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by KCNIP2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KCNIP2 BINDING SITE, designated SEQ ID:14673, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56070] Another function of GAM7957 is therefore inhibition of Kv channel interacting protein 2 (KCNIP2, Accession NP_775285.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KCNIP2.

[56071] Kv channel interacting protein 2 (KCNIP2, Accession NP_775287.1) is another GAM7957 target gene, herein designated TARGET GENE. KCNIP2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by KCNIP2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KCNIP2 BINDING SITE, designated SEQ ID:14673, to the nu-

cleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56072] Another function of GAM7957 is therefore inhibition of Kv channel interacting protein 2 (KCNIP2, Accession NP_775287.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KCNIP2.

[56073] Kv channel interacting protein 2 (KCNIP2, Accession NP_775283.1) is another GAM7957 target gene, herein designated TARGET GENE. KCNIP2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by KCNIP2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KCNIP2 BINDING SITE, designated SEQ ID:14673, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56074] Another function of GAM7957 is therefore inhibition of Kv channel interacting protein 2 (KCNIP2, Accession NP_775283.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KCNIP2.

[56075] Kv channel interacting protein 2 (KCNIP2, Accession NP_055406.2) is another GAM7957 target gene, herein designated TARGET GENE. KCNIP2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by KCNIP2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KCNIP2 BINDING SITE, designated SEQ ID:14673, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56076] Another function of GAM7957 is therefore inhibition of Kv channel interacting protein 2 (KCNIP2, Accession NP_055406.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KCNIP2.

[56077] Potassium inwardly-rectifying channel, subfamily j, member 14 (KCNJ14, Accession NP_733838.1) is another GAM7957 target gene, herein designated TARGET GENE. KCNJ14 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by KCNJ14, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING

SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KCNJ14 BINDING SITE, designated SEQ ID:18135, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56078] Another function of GAM7957 is therefore inhibition of Potassium inwardly-rectifying channel, subfamily j, member 14 (KCNJ14, Accession NP_733838.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KCNJ14.

[56079] Potassium inwardly-rectifying channel, subfamily j, member 5 (KCNJ5, Accession NP_000881.3) is another GAM7957 target gene, herein designated TARGET GENE. KCNJ5 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KCNJ5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KCNJ5 BINDING SITE, designated SEQ ID:15224, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56080] Another function of GAM7957 is therefore inhibition of

Potassium inwardly-rectifying channel, subfamily j, member 5 (KCNJ5, Accession NP_000881.3), a gene which is a potassium inwardly-rectifying channel. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KCNJ5.

[56081] The function of KCNJ5 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM72.1. Potassium channel, subfamily k, member 6 (KCNK6, Accession NP_004814.1) is another GAM7957 target gene, herein designated TARGET GENE. KCNK6 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KCNK6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KCNK6 BINDING SITE, designated SEQ ID:2853, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56082] Another function of GAM7957 is therefore inhibition of Potassium channel, subfamily k, member 6 (KCNK6, Accession NP_004814.1), a gene which is an inward rectify-

ing potassium channel protein. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KCNK6.

[56083] The function of KCNK6 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM72.1. Potassium large conductance calcium-activated channel, subfamily m beta member 3 (KCNMB3, Accession NP_741981.1) is another GAM7957 target gene, herein designated TARGET GENE. KCNMB3 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by KCNMB3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KCNMB3 BINDING SITE, designated SEQ ID:7035, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56084] Another function of GAM7957 is therefore inhibition of Potassium large conductance calcium-activated channel, subfamily m beta member 3 (KCNMB3, Accession NP_741981.1), a gene which is similar to a regulatory subunit of Ca- activated potassium channel. Accordingly,

utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KCNMB3.

[56085] The function of KCNMB3 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM94.1.KIAA0125 (Accession NP_055607.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA0125 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0125, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0125 BINDING SITE, designated SEQ ID:4129, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56086] Another function of GAM7957 is therefore inhibition of KIAA0125 (Accession NP_055607.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0125.

[56087] KIAA0140 (Accession NP_055476.1) is another GAM7957

target gene, herein designated TARGET GENE. KIAA0140 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0140, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0140 BINDING SITE, designated SEQ ID:1809, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56088] Another function of GAM7957 is therefore inhibition of KIAA0140 (Accession NP_055476.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0140.

[56089] KIAA0211 (Accession NP_055445.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA0211 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by KIAA0211, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0211 BINDING SITE, designated SEQ ID:12651, to the nucleotide sequence of GAM7957 RNA, herein designated

GAM RNA, also designated SEQ ID:297.

[56090] Another function of GAM7957 is therefore inhibition of KIAA0211 (Accession NP_055445.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0211.

[56091] KIAA0237 (Accession NP_055562.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA0237 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0237, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0237 BINDING SITE, designated SEQ ID:8698, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56092] Another function of GAM7957 is therefore inhibition of KIAA0237 (Accession NP_055562.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0237.

[56093] KIAA0266 (Accession NP_067677.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA0266

BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0266, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0266 BINDING SITE, designated SEQ ID:15976, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56094] Another function of GAM7957 is therefore inhibition of KIAA0266 (Accession NP_067677.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0266.

[56095] KIAA0276 (Accession XP_048199.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA0276 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by KIAA0276, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0276 BINDING SITE, designated SEQ ID:17630, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56096] Another function of GAM7957 is therefore inhibition of KIAA0276 (Accession XP_048199.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0276.

[56097] KIAA0355 (Accession NP_055501.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA0355 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0355, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0355 BINDING SITE, designated SEQ ID:6039, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56098] Another function of GAM7957 is therefore inhibition of KIAA0355 (Accession NP_055501.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0355.

[56099] KIAA0397 (Accession XP_029438.2) is another GAM7957 target gene, herein designated TARGET GENE. KIAA0397 BINDING SITE is a target binding site found in the 3' un-

translated region of mRNA encoded by KIAA0397, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0397 BINDING SITE, designated SEQ ID:9795, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56100] Another function of GAM7957 is therefore inhibition of KIAA0397 (Accession XP_029438.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0397.

[56101] KIAA0408 (Accession NP_055517.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA0408 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0408, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0408 BINDING SITE, designated SEQ ID:11277, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56102] Another function of GAM7957 is therefore inhibition of

KIAA0408 (Accession NP_055517.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0408.

[56103] KIAA0419 (Accession NP_055526.2) is another GAM7957 target gene, herein designated TARGET GENE. KIAA0419 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0419, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0419 BINDING SITE, designated SEQ ID:10439, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56104] Another function of GAM7957 is therefore inhibition of KIAA0419 (Accession NP_055526.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0419.

[56105] KIAA0427 (Accession NP_055587.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA0427 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0427, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0427 BINDING SITE, designated SEQ ID:5274, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56106] Another function of GAM7957 is therefore inhibition of KIAA0427 (Accession NP_055587.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0427.

[56107] KIAA0446 (Accession XP_044155.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA0446 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by KIAA0446, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0446 BINDING SITE, designated SEQ ID:19849, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56108] Another function of GAM7957 is therefore inhibition of KIAA0446 (Accession XP_044155.1) . Accordingly, utilities

of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0446.

[56109] KIAA0449 (Accession NP_060066.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA0449 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0449, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0449 BINDING SITE, designated SEQ ID:19104, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56110] Another function of GAM7957 is therefore inhibition of KIAA0449 (Accession NP_060066.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0449.

[56111] KIAA0469 (Accession NP_055666.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA0469 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0469, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0469 BINDING SITE, designated SEQ ID:7582, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56112] Another function of GAM7957 is therefore inhibition of KIAA0469 (Accession NP_055666.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0469.

[56113] KIAA0471 (Accession NP_055672.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA0471 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0471, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0471 BINDING SITE, designated SEQ ID:2975, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56114] Another function of GAM7957 is therefore inhibition of KIAA0471 (Accession NP_055672.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment

of diseases and clinical conditions associated with KIAA0471.

[56115] KIAA0472 (Accession XP_290898.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA0472 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0472, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0472 BINDING SITE, designated SEQ ID:18691, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56116] Another function of GAM7957 is therefore inhibition of KIAA0472 (Accession XP_290898.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0472.

[56117] KIAA0475 (Accession NP_055679.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA0475 BINDING SITE1 and KIAA0475 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by KIAA0475, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III

of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0475 BINDING SITE1 and KIAA0475 BINDING SITE2, designated SEQ ID:1492 and SEQ ID:11624 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56118] Another function of GAM7957 is therefore inhibition of KIAA0475 (Accession NP_055679.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0475.

[56119] KIAA0476 (Accession NP_055671.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA0476 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by KIAA0476, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0476 BINDING SITE, designated SEQ ID:10354, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56120] Another function of GAM7957 is therefore inhibition of KIAA0476 (Accession NP_055671.1) . Accordingly, utilities

of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0476.

[56121] KIAA0478 (Accession NP_055685.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA0478 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0478, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0478 BINDING SITE, designated SEQ ID:18191, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56122] Another function of GAM7957 is therefore inhibition of KIAA0478 (Accession NP_055685.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0478.

[56123] KIAA0514 (Accession NP_055511.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA0514 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0514, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0514 BINDING SITE, designated SEQ ID:1907, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56124] Another function of GAM7957 is therefore inhibition of KIAA0514 (Accession NP_055511.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0514.

[56125] KIAA0528 (Accession NP_055617.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA0528 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by KIAA0528, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0528 BINDING SITE, designated SEQ ID:4002, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56126] Another function of GAM7957 is therefore inhibition of KIAA0528 (Accession NP_055617.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment

of diseases and clinical conditions associated with KIAA0528.

[56127] KIAA0557 (Accession XP_085507.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA0557 BINDING SITE1 and KIAA0557 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by KIAA0557, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0557 BINDING SITE1 and KIAA0557 BINDING SITE2, designated SEQ ID:2789 and SEQ ID:2342 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56128] Another function of GAM7957 is therefore inhibition of KIAA0557 (Accession XP_085507.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0557.

[56129] KIAA0563 (Accession NP_055649.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA0563 BINDING SITE1 and KIAA0563 BINDING SITE2 are target binding sites found in untranslated regions of mRNA en-

coded by KIAA0563, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0563 BINDING SITE1 and KIAA0563 BINDING SITE2, designated SEQ ID:15108 and SEQ ID:609 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56130] Another function of GAM7957 is therefore inhibition of KIAA0563 (Accession NP_055649.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0563.

[56131] KIAA0565 (Accession XP_039912.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA0565 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0565, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0565 BINDING SITE, designated SEQ ID:12789, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56132] Another function of GAM7957 is therefore inhibition of KIAA0565 (Accession XP_039912.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0565.

[56133] KIAA0590 (Accession NP_055529.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA0590 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by KIAA0590, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0590 BINDING SITE, designated SEQ ID:9935, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56134] Another function of GAM7957 is therefore inhibition of KIAA0590 (Accession NP_055529.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0590.

[56135] KIAA0628 (Accession NP_055604.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA0628 BINDING SITE is a target binding site found in the 3' un-

translated region of mRNA encoded by KIAA0628, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0628 BINDING SITE, designated SEQ ID:16922, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56136] Another function of GAM7957 is therefore inhibition of KIAA0628 (Accession NP_055604.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0628.

[56137] KIAA0645 (Accession NP_055477.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA0645 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0645, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0645 BINDING SITE, designated SEQ ID:17488, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56138] Another function of GAM7957 is therefore inhibition of

KIAA0645 (Accession NP_055477.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0645.

[56139] KIAA0711 (Accession NP_055682.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA0711 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0711, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0711 BINDING SITE, designated SEQ ID:6186, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56140] Another function of GAM7957 is therefore inhibition of KIAA0711 (Accession NP_055682.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0711.

[56141] KIAA0759 (Accession NP_056120.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA0759 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by KIAA0759, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0759 BINDING SITE, designated SEQ ID:16933, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56142] Another function of GAM7957 is therefore inhibition of KIAA0759 (Accession NP_056120.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0759.

[56143] KIAA0773 (Accession NP_055505.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA0773 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0773, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0773 BINDING SITE, designated SEQ ID:11119, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56144] Another function of GAM7957 is therefore inhibition of KIAA0773 (Accession NP_055505.1) . Accordingly, utilities

of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0773.

[56145] KIAA0825 (Accession XP_027906.5) is another GAM7957 target gene, herein designated TARGET GENE. KIAA0825 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0825, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0825 BINDING SITE, designated SEQ ID:15983, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56146] Another function of GAM7957 is therefore inhibition of KIAA0825 (Accession XP_027906.5) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0825.

[56147] KIAA0831 (Accession NP_055739.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA0831 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0831, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0831 BINDING SITE, designated SEQ ID:3413, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56148] Another function of GAM7957 is therefore inhibition of KIAA0831 (Accession NP_055739.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0831.

[56149] KIAA0872 (Accession NP_055755.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA0872 BINDING SITE1 and KIAA0872 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by KIAA0872, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0872 BINDING SITE1 and KIAA0872 BINDING SITE2, designated SEQ ID:4557 and SEQ ID:19196 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56150] Another function of GAM7957 is therefore inhibition of

KIAA0872 (Accession NP_055755.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0872.

[56151] KIAA0884 (Accession XP_046660.4) is another GAM7957 target gene, herein designated TARGET GENE. KIAA0884 BINDING SITE1 and KIAA0884 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by KIAA0884, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0884 BINDING SITE1 and KIAA0884 BINDING SITE2, designated SEQ ID:5856 and SEQ ID:3610 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56152] Another function of GAM7957 is therefore inhibition of KIAA0884 (Accession XP_046660.4) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0884.

[56153] KIAA0889 (Accession NP_056192.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA0889

BINDING SITE1 through KIAA0889 BINDING SITE3 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by KIAA0889, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0889 BINDING SITE1 through KIAA0889 BINDING SITE3, designated SEQ ID:13091, SEQ ID:13091 and SEQ ID:3264 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56154] Another function of GAM7957 is therefore inhibition of KIAA0889 (Accession NP_056192.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0889.

[56155] KIAA0889 (Accession NP_056192.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA0889 BINDING SITE1 through KIAA0889 BINDING SITE3 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by KIAA0889, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the

complementarity of the nucleotide sequences of KIAA0889 BINDING SITE1 through KIAA0889 BINDING SITE3, designated SEQ ID:7577, SEQ ID:12683 and SEQ ID:3136 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56156] Another function of GAM7957 is therefore inhibition of KIAA0889 (Accession NP_056192.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0889.

[56157] KIAA0907 (Accession NP_055764.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA0907 BINDING SITE1 and KIAA0907 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by KIAA0907, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0907 BINDING SITE1 and KIAA0907 BINDING SITE2, designated SEQ ID:11102 and SEQ ID:13066 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56158] Another function of GAM7957 is therefore inhibition of KIAA0907 (Accession NP_055764.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0907.

[56159] KIAA0924 (Accession NP_055712.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA0924 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0924, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0924 BINDING SITE, designated SEQ ID:10571, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56160] Another function of GAM7957 is therefore inhibition of KIAA0924 (Accession NP_055712.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0924.

[56161] KIAA0935 (Accession XP_052620.6) is another GAM7957 target gene, herein designated TARGET GENE. KIAA0935 BINDING SITE is a target binding site found in the 3' un-

translated region of mRNA encoded by KIAA0935, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0935 BINDING SITE, designated SEQ ID:2363, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56162] Another function of GAM7957 is therefore inhibition of KIAA0935 (Accession XP_052620.6) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0935.

[56163] KIAA0981 (Accession XP_028867.2) is another GAM7957 target gene, herein designated TARGET GENE. KIAA0981 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0981, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0981 BINDING SITE, designated SEQ ID:2679, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56164] Another function of GAM7957 is therefore inhibition of

KIAA0981 (Accession XP_028867.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0981.

[56165] KIAA1001 (Accession NP_055775.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1001 BINDING SITE1 through KIAA1001 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by KIAA1001, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1001 BINDING SITE1 through KIAA1001 BINDING SITE3, designated SEQ ID:19927, SEQ ID:15875 and SEQ ID:1269 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56166] Another function of GAM7957 is therefore inhibition of KIAA1001 (Accession NP_055775.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1001.

[56167] KIAA1032 (Accession XP_038604.4) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1032

BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1032, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1032 BINDING SITE, designated SEQ ID:5109, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56168] Another function of GAM7957 is therefore inhibition of KIAA1032 (Accession XP_038604.4) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1032.

[56169] KIAA1036 (Accession NP_055724.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1036 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1036, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1036 BINDING SITE, designated SEQ ID:9356, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56170] Another function of GAM7957 is therefore inhibition of KIAA1036 (Accession NP_055724.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1036.

[56171] KIAA1086 (Accession XP_047610.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1086 BINDING SITE1 and KIAA1086 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by KIAA1086, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1086 BINDING SITE1 and KIAA1086 BINDING SITE2, designated SEQ ID:6649 and SEQ ID:1442 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56172] Another function of GAM7957 is therefore inhibition of KIAA1086 (Accession XP_047610.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1086.

[56173] KIAA1115 (Accession NP_055746.1) is another GAM7957

target gene, herein designated TARGET GENE. KIAA1115 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by KIAA1115, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1115 BINDING SITE, designated SEQ ID:6299, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56174] Another function of GAM7957 is therefore inhibition of KIAA1115 (Accession NP_055746.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1115.

[56175] KIAA1126 (Accession XP_050325.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1126 BINDING SITE1 and KIAA1126 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by KIAA1126, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1126 BINDING SITE1 and KIAA1126 BINDING SITE2, designated SEQ ID:2893 and

SEQ ID:18121 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56176] Another function of GAM7957 is therefore inhibition of KIAA1126 (Accession XP_050325.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1126.

[56177] KIAA1136 (Accession XP_166110.3) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1136 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by KIAA1136, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1136 BINDING SITE, designated SEQ ID:6682, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56178] Another function of GAM7957 is therefore inhibition of KIAA1136 (Accession XP_166110.3) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1136.

[56179] KIAA1155 (Accession XP_030864.2) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1155 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1155, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1155 BINDING SITE, designated SEQ ID:3204, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56180] Another function of GAM7957 is therefore inhibition of KIAA1155 (Accession XP_030864.2). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1155.

[56181] KIAA1164 (Accession XP_045358.2) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1164 BINDING SITE1 and KIAA1164 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by KIAA1164, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1164 BINDING SITE1 and

KIAA1164 BINDING SITE2, designated SEQ ID:6526 and SEQ ID:6420 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56182] Another function of GAM7957 is therefore inhibition of KIAA1164 (Accession XP_045358.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1164.

[56183] KIAA1181 (Accession NP_065195.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1181 BINDING SITE1 and KIAA1181 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by KIAA1181, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1181 BINDING SITE1 and KIAA1181 BINDING SITE2, designated SEQ ID:9991 and SEQ ID:16802 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56184] Another function of GAM7957 is therefore inhibition of KIAA1181 (Accession NP_065195.1) . Accordingly, utilities

of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1181.

[56185] KIAA1193 (Accession XP_041843.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1193 BINDING SITE1 and KIAA1193 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by KIAA1193, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1193 BINDING SITE1 and KIAA1193 BINDING SITE2, designated SEQ ID:8722 and SEQ ID:8382 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56186] Another function of GAM7957 is therefore inhibition of KIAA1193 (Accession XP_041843.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1193.

[56187] KIAA1202 (Accession XP_050478.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1202 BINDING SITE1 and KIAA1202 BINDING SITE2 are target

binding sites found in untranslated regions of mRNA encoded by KIAA1202, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1202 BINDING SITE1 and KIAA1202 BINDING SITE2, designated SEQ ID:15089 and SEQ ID:8547 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56188] Another function of GAM7957 is therefore inhibition of KIAA1202 (Accession XP_050478.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1202.

[56189] KIAA1228 (Accession XP_036408.3) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1228 BINDING SITE1 and KIAA1228 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by KIAA1228, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1228 BINDING SITE1 and KIAA1228 BINDING SITE2, designated SEQ ID:15089 and

SEQ ID:9422 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56190] Another function of GAM7957 is therefore inhibition of KIAA1228 (Accession XP_036408.3) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1228.

[56191] KIAA1240 (Accession XP_039676.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1240 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1240, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1240 BINDING SITE, designated SEQ ID:15329, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56192] Another function of GAM7957 is therefore inhibition of KIAA1240 (Accession XP_039676.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1240.

[56193] KIAA1270 (Accession XP_291190.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1270 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1270, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1270 BINDING SITE, designated SEQ ID:3813, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56194] Another function of GAM7957 is therefore inhibition of KIAA1270 (Accession XP_291190.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1270.

[56195] KIAA1271 (Accession XP_045472.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1271 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1271, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1271 BINDING SITE, designated SEQ ID:18088, to the

nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56196] Another function of GAM7957 is therefore inhibition of KIAA1271 (Accession XP_045472.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1271.

[56197] KIAA1276 (Accession XP_039169.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1276 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1276, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1276 BINDING SITE, designated SEQ ID:13059, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56198] Another function of GAM7957 is therefore inhibition of KIAA1276 (Accession XP_039169.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1276.

[56199] KIAA1277 (Accession XP_035114.3) is another GAM7957

target gene, herein designated TARGET GENE. KIAA1277 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1277, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1277 BINDING SITE, designated SEQ ID:3417, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56200] Another function of GAM7957 is therefore inhibition of KIAA1277 (Accession XP_035114.3). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1277.

[56201] KIAA1340 (Accession XP_044836.2) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1340 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1340, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1340 BINDING SITE, designated SEQ ID:3882, to the nucleotide sequence of GAM7957 RNA, herein designated

GAM RNA, also designated SEQ ID:297.

[56202] Another function of GAM7957 is therefore inhibition of KIAA1340 (Accession XP_044836.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1340.

[56203] KIAA1348 (Accession XP_043826.2) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1348 BINDING SITE1 and KIAA1348 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by KIAA1348, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1348 BINDING SITE1 and KIAA1348 BINDING SITE2, designated SEQ ID:9419 and SEQ ID:12559 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56204] Another function of GAM7957 is therefore inhibition of KIAA1348 (Accession XP_043826.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1348.

[56205] KIAA1377 (Accession XP_040708.2) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1377 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1377, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1377 BINDING SITE, designated SEQ ID:20104, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56206] Another function of GAM7957 is therefore inhibition of KIAA1377 (Accession XP_040708.2). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1377.

[56207] KIAA1399 (Accession XP_046685.4) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1399 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1399, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1399 BINDING SITE, designated SEQ ID:10279, to the

nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56208] Another function of GAM7957 is therefore inhibition of KIAA1399 (Accession XP_046685.4) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1399.

[56209] KIAA1404 (Accession NP_066363.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1404 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1404, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1404 BINDING SITE, designated SEQ ID:6419, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56210] Another function of GAM7957 is therefore inhibition of KIAA1404 (Accession NP_066363.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1404.

[56211] KIAA1423 (Accession XP_029703.1) is another GAM7957

target gene, herein designated TARGET GENE. KIAA1423 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1423, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1423 BINDING SITE, designated SEQ ID:12788, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56212] Another function of GAM7957 is therefore inhibition of KIAA1423 (Accession XP_029703.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1423.

[56213] KIAA1447 (Accession XP_290770.2) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1447 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by KIAA1447, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1447 BINDING SITE, designated SEQ ID:10517, to the nucleotide sequence of GAM7957 RNA, herein designated

GAM RNA, also designated SEQ ID:297.

[56214] Another function of GAM7957 is therefore inhibition of KIAA1447 (Accession XP_290770.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1447.

[56215] KIAA1456 (Accession XP_040100.3) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1456 BINDING SITE1 and KIAA1456 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by KIAA1456, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1456 BINDING SITE1 and KIAA1456 BINDING SITE2, designated SEQ ID:18691 and SEQ ID:3412 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56216] Another function of GAM7957 is therefore inhibition of KIAA1456 (Accession XP_040100.3) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1456.

[56217] KIAA1473 (Accession XP_047550.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1473 BINDING SITE1 and KIAA1473 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by KIAA1473, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1473 BINDING SITE1 and KIAA1473 BINDING SITE2, designated SEQ ID:1492 and SEQ ID:5557 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56218] Another function of GAM7957 is therefore inhibition of KIAA1473 (Accession XP_047550.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1473.

[56219] KIAA1486 (Accession XP_041126.4) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1486 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1486, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of KIAA1486 BINDING SITE, designated SEQ ID:15677, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56220] Another function of GAM7957 is therefore inhibition of KIAA1486 (Accession XP_041126.4) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1486.

[56221] KIAA1518 (Accession XP_170889.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1518 BINDING SITE1 through KIAA1518 BINDING SITE4 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by KIAA1518, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1518 BINDING SITE1 through KIAA1518 BINDING SITE4, designated SEQ ID:18859, SEQ ID:14466, SEQ ID:10439 and SEQ ID:17403 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56222] Another function of GAM7957 is therefore inhibition of

KIAA1518 (Accession XP_170889.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1518.

[56223] KIAA1538 (Accession XP_049474.4) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1538 BINDING SITE1 and KIAA1538 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by KIAA1538, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1538 BINDING SITE1 and KIAA1538 BINDING SITE2, designated SEQ ID:17039 and SEQ ID:5273 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56224] Another function of GAM7957 is therefore inhibition of KIAA1538 (Accession XP_049474.4) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1538.

[56225] KIAA1542 (Accession XP_290536.2) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1542

BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by KIAA1542, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1542 BINDING SITE, designated SEQ ID:9321, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56226] Another function of GAM7957 is therefore inhibition of KIAA1542 (Accession XP_290536.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1542.

[56227] KIAA1554 (Accession XP_290768.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1554 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1554, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1554 BINDING SITE, designated SEQ ID:16064, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56228] Another function of GAM7957 is therefore inhibition of KIAA1554 (Accession XP_290768.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1554.

[56229] KIAA1559 (Accession XP_054472.2) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1559 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1559, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1559 BINDING SITE, designated SEQ ID:15359, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56230] Another function of GAM7957 is therefore inhibition of KIAA1559 (Accession XP_054472.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1559.

[56231] KIAA1594 (Accession XP_050754.5) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1594 BINDING SITE is a target binding site found in the 3' un-

translated region of mRNA encoded by KIAA1594, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1594 BINDING SITE, designated SEQ ID:17403, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56232] Another function of GAM7957 is therefore inhibition of KIAA1594 (Accession XP_050754.5) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1594.

[56233] KIAA1614 (Accession XP_046531.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1614 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1614, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1614 BINDING SITE, designated SEQ ID:12333, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56234] Another function of GAM7957 is therefore inhibition of

KIAA1614 (Accession XP_046531.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1614.

[56235] KIAA1618 (Accession XP_290769.2) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1618 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1618, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1618 BINDING SITE, designated SEQ ID:17901, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56236] Another function of GAM7957 is therefore inhibition of KIAA1618 (Accession XP_290769.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1618.

[56237] KIAA1630 (Accession NP_061176.2) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1630 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1630, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1630 BINDING SITE, designated SEQ ID:15143, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56238] Another function of GAM7957 is therefore inhibition of KIAA1630 (Accession NP_061176.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1630.

[56239] KIAA1656 (Accession XP_038022.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1656 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by KIAA1656, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1656 BINDING SITE, designated SEQ ID:7120, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56240] Another function of GAM7957 is therefore inhibition of KIAA1656 (Accession XP_038022.1) . Accordingly, utilities

of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1656.

[56241] KIAA1673 (Accession XP_047672.4) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1673 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by KIAA1673, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1673 BINDING SITE, designated SEQ ID:17218, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56242] Another function of GAM7957 is therefore inhibition of KIAA1673 (Accession XP_047672.4) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1673.

[56243] KIAA1674 (Accession XP_290462.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1674 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1674, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1674 BINDING SITE, designated SEQ ID:10619, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56244] Another function of GAM7957 is therefore inhibition of KIAA1674 (Accession XP_290462.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1674.

[56245] KIAA1712 (Accession NP_085136.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1712 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by KIAA1712, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1712 BINDING SITE, designated SEQ ID:1763, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56246] Another function of GAM7957 is therefore inhibition of KIAA1712 (Accession NP_085136.1) . Accordingly, utilities

of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1712.

[56247] KIAA1715 (Accession XP_042834.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1715 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1715, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1715 BINDING SITE, designated SEQ ID:2721, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56248] Another function of GAM7957 is therefore inhibition of KIAA1715 (Accession XP_042834.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1715.

[56249] KIAA1724 (Accession XP_040280.2) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1724 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1724, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1724 BINDING SITE, designated SEQ ID:7563, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56250] Another function of GAM7957 is therefore inhibition of KIAA1724 (Accession XP_040280.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1724.

[56251] KIAA1735 (Accession XP_290496.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1735 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1735, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1735 BINDING SITE, designated SEQ ID:10758, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56252] Another function of GAM7957 is therefore inhibition of KIAA1735 (Accession XP_290496.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment

of diseases and clinical conditions associated with KIAA1735.

[56253] KIAA1771 (Accession XP_086404.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1771 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1771, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1771 BINDING SITE, designated SEQ ID:3051, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56254] Another function of GAM7957 is therefore inhibition of KIAA1771 (Accession XP_086404.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1771.

[56255] KIAA1827 (Accession XP_290834.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1827 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by KIAA1827, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of KIAA1827 BINDING SITE, designated SEQ ID:13774, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56256] Another function of GAM7957 is therefore inhibition of KIAA1827 (Accession XP_290834.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1827.

[56257] KIAA1836 (Accession XP_114087.2) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1836 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1836, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1836 BINDING SITE, designated SEQ ID:9403, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56258] Another function of GAM7957 is therefore inhibition of KIAA1836 (Accession XP_114087.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

KIAA1836.

[56259] KIAA1841 (Accession XP_087056.4) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1841 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1841, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1841 BINDING SITE, designated SEQ ID:1419, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56260] Another function of GAM7957 is therefore inhibition of KIAA1841 (Accession XP_087056.4) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1841.

[56261] KIAA1856 (Accession XP_166549.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1856 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by KIAA1856, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

KIAA1856 BINDING SITE, designated SEQ ID:17219, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56262] Another function of GAM7957 is therefore inhibition of KIAA1856 (Accession XP_166549.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1856.

[56263] KIAA1870 (Accession NP_116277.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1870 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by KIAA1870, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1870 BINDING SITE, designated SEQ ID:9531, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56264] Another function of GAM7957 is therefore inhibition of KIAA1870 (Accession NP_116277.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

KIAA1870.

[56265] KIAA1871 (Accession XP_290737.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1871 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1871, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1871 BINDING SITE, designated SEQ ID:17416, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56266] Another function of GAM7957 is therefore inhibition of KIAA1871 (Accession XP_290737.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1871.

[56267] KIAA1872 (Accession NP_149053.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1872 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1872, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

KIAA1872 BINDING SITE, designated SEQ ID:16024, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56268] Another function of GAM7957 is therefore inhibition of KIAA1872 (Accession NP_149053.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1872.

[56269] KIAA1879 (Accession XP_056635.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1879 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1879, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1879 BINDING SITE, designated SEQ ID:5944, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56270] Another function of GAM7957 is therefore inhibition of KIAA1879 (Accession XP_056635.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1879.

[56271] KIAA1904 (Accession XP_056282.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1904 BINDING SITE1 and KIAA1904 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by KIAA1904, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1904 BINDING SITE1 and KIAA1904 BINDING SITE2, designated SEQ ID:19541 and SEQ ID:2653 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56272] Another function of GAM7957 is therefore inhibition of KIAA1904 (Accession XP_056282.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1904.

[56273] KIAA1917 (Accession XP_290732.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1917 BINDING SITE1 through KIAA1917 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by KIAA1917, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING

SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1917 BINDING SITE1 through KIAA1917 BINDING SITE3, designated SEQ ID:19051, SEQ ID:15343 and SEQ ID:5830 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56274] Another function of GAM7957 is therefore inhibition of KIAA1917 (Accession XP_290732.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1917.

[56275] KIAA1920 (Accession XP_085210.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1920 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by KIAA1920, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1920 BINDING SITE, designated SEQ ID:10532, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56276] Another function of GAM7957 is therefore inhibition of KIAA1920 (Accession XP_085210.1) . Accordingly, utilities

of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1920.

[56277] KIAA1936 (Accession XP_056082.5) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1936 BINDING SITE1 through KIAA1936 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by KIAA1936, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1936 BINDING SITE1 through KIAA1936 BINDING SITE3, designated SEQ ID:14501, SEQ ID:9047 and SEQ ID:19057 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56278] Another function of GAM7957 is therefore inhibition of KIAA1936 (Accession XP_056082.5) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1936.

[56279] KIAA1940 (Accession XP_086981.2) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1940 BINDING SITE is a target binding site found in the 3' un-

translated region of mRNA encoded by KIAA1940, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1940 BINDING SITE, designated SEQ ID:10268, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56280] Another function of GAM7957 is therefore inhibition of KIAA1940 (Accession XP_086981.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1940.

[56281] KIAA1941 (Accession XP_059318.2) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1941 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1941, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1941 BINDING SITE, designated SEQ ID:9414, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56282] Another function of GAM7957 is therefore inhibition of

KIAA1941 (Accession XP_059318.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1941.

[56283] KIAA1949 (Accession XP_300202.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1949 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by KIAA1949, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1949 BINDING SITE, designated SEQ ID:17575, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56284] Another function of GAM7957 is therefore inhibition of KIAA1949 (Accession XP_300202.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1949.

[56285] KIAA1949 (Accession XP_166376.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1949 BINDING SITE is a target binding site found in the 5' un-

translated region of multiple transcripts of mRNA encoded by KIAA1949, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1949 BINDING SITE, designated SEQ ID:17575, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56286] Another function of GAM7957 is therefore inhibition of KIAA1949 (Accession XP_166376.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1949.

[56287] KIAA1949 (Accession XP_300167.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1949 BINDING SITE is a target binding site found in the 5` untranslated region of multiple transcripts of mRNA encoded by KIAA1949, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1949 BINDING SITE, designated SEQ ID:17575, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ

ID:297.

[56288] Another function of GAM7957 is therefore inhibition of KIAA1949 (Accession XP_300167.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1949.

[56289] KIAA1951 (Accession XP_057401.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1951 BINDING SITE1 and KIAA1951 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by KIAA1951, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1951 BINDING SITE1 and KIAA1951 BINDING SITE2, designated SEQ ID:15343 and SEQ ID:13263 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56290] Another function of GAM7957 is therefore inhibition of KIAA1951 (Accession XP_057401.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1951.

[56291] KIAA1954 (Accession XP_085375.4) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1954 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1954, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1954 BINDING SITE, designated SEQ ID:11132, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56292] Another function of GAM7957 is therefore inhibition of KIAA1954 (Accession XP_085375.4). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1954.

[56293] KIAA1956 (Accession XP_085836.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1956 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by KIAA1956, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1956 BINDING SITE, designated SEQ ID:4403, to the

nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56294] Another function of GAM7957 is therefore inhibition of KIAA1956 (Accession XP_085836.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1956.

[56295] KIAA1958 (Accession XP_088566.2) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1958 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1958, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1958 BINDING SITE, designated SEQ ID:18691, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56296] Another function of GAM7957 is therefore inhibition of KIAA1958 (Accession XP_088566.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1958.

[56297] KIAA1979 (Accession XP_113984.2) is another GAM7957

target gene, herein designated TARGET GENE. KIAA1979 BINDING SITE1 and KIAA1979 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by KIAA1979, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1979 BINDING SITE1 and KIAA1979 BINDING SITE2, designated SEQ ID:10353 and SEQ ID:10065 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56298] Another function of GAM7957 is therefore inhibition of KIAA1979 (Accession XP_113984.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1979.

[56299] KIAA1981 (Accession XP_114000.1) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1981 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1981, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

KIAA1981 BINDING SITE, designated SEQ ID:7592, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56300] Another function of GAM7957 is therefore inhibition of KIAA1981 (Accession XP_114000.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1981.

[56301] KIAA1998 (Accession XP_068710.3) is another GAM7957 target gene, herein designated TARGET GENE. KIAA1998 BINDING SITE1 and KIAA1998 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by KIAA1998, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1998 BINDING SITE1 and KIAA1998 BINDING SITE2, designated SEQ ID:10487 and SEQ ID:10265 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56302] Another function of GAM7957 is therefore inhibition of KIAA1998 (Accession XP_068710.3) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment

of diseases and clinical conditions associated with KIAA1998.

[56303] KIF11 (Accession NP_004514.2) is another GAM7957 target gene, herein designated TARGET GENE. KIF11 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIF11, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIF11 BINDING SITE, designated SEQ ID:5160, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56304] Another function of GAM7957 is therefore inhibition of KIF11 (Accession NP_004514.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIF11.

[56305] Kinesin family member 13b (KIF13B, Accession NP_056069.1) is another GAM7957 target gene, herein designated TARGET GENE. KIF13B BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIF13B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the

nucleotide sequences of KIF13B BINDING SITE, designated SEQ ID:19613, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56306] Another function of GAM7957 is therefore inhibition of Kinesin family member 13b (KIF13B, Accession NP_056069.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIF13B.

[56307] Kinesin family member 14 (KIF14, Accession NP_055690.1) is another GAM7957 target gene, herein designated TARGET GENE. KIF14 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIF14, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIF14 BINDING SITE, designated SEQ ID:2937, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56308] Another function of GAM7957 is therefore inhibition of Kinesin family member 14 (KIF14, Accession NP_055690.1) . Accordingly, utilities of GAM7957 include

diagnosis, prevention and treatment of diseases and clinical conditions associated with KIF14.

[56309] Kinesin family member 1b (KIF1B, Accession NP_055889.1) is another GAM7957 target gene, herein designated TARGET GENE. KIF1B BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIF1B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIF1B BINDING SITE, designated SEQ ID:10435, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56310] Another function of GAM7957 is therefore inhibition of Kinesin family member 1b (KIF1B, Accession NP_055889.1), a gene which motor for anterograde transport of mitochondria. has a microtubule plus end-directed motility. and therefore is associated with Charcot-marie-tooth disease, neuronal type, a. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Charcot-marie-tooth disease, neuronal type, a, and of other diseases and clinical conditions associated with KIF1B.

[56311] The function of KIF1B and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM72.1. Kinesin family member 3b (KIF3B, Accession NP_004789.1) is another GAM7957 target gene, herein designated TARGET GENE. KIF3B BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIF3B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIF3B BINDING SITE, designated SEQ ID:17418, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56312] Another function of GAM7957 is therefore inhibition of Kinesin family member 3b (KIF3B, Accession NP_004789.1), a gene which is a microtubule-based anterograde translocator for membranous organelles. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIF3B.

[56313] The function of KIF3B and its association with various diseases and clinical conditions, has been established by

previous studies, as described hereinabove with reference to GAM72.1.Kinesin family member 5c (KIF5C, Accession NP_004513.1) is another GAM7957 target gene, herein designated TARGET GENE. KIF5C BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by KIF5C, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIF5C BINDING SITE, designated SEQ ID:2807, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56314] Another function of GAM7957 is therefore inhibition of Kinesin family member 5c (KIF5C, Accession NP_004513.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIF5C.

[56315] KLC2L (Accession NP_660318.1) is another GAM7957 target gene, herein designated TARGET GENE. KLC2L BINDING SITE is a target binding site found in the 3` untranslated region of multiple transcripts of mRNA encoded by KLC2L, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KLC2L BINDING SITE, designated SEQ ID:13397, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56316] Another function of GAM7957 is therefore inhibition of KLC2L (Accession NP_660318.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KLC2L.

[56317] Killer cell lectin-like receptor subfamily g, member 1 (KLRG1, Accession NP_005801.2) is another GAM7957 target gene, herein designated TARGET GENE. KLRG1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KLRG1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KLRG1 BINDING SITE, designated SEQ ID:13091, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56318] Another function of GAM7957 is therefore inhibition of Killer cell lectin-like receptor subfamily g, member 1 (KLRG1, Accession NP_005801.2), a gene which plays a

role in host defense;. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KLRG1.

[56319] The function of KLRG1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM347.2.Kringle containing transmembrane protein 1 (KREMEN1, Accession NP_114434.3) is another GAM7957 target gene, herein designated TARGET GENE. KREMEN1 BINDING SITE1 and KREMEN1 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by KREMEN1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KREMEN1 BINDING SITE1 and KREMEN1 BINDING SITE2, designated SEQ ID:14776 and SEQ ID:9420 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56320] Another function of GAM7957 is therefore inhibition of Kringle containing transmembrane protein 1 (KREMEN1, Accession NP_114434.3) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of

diseases and clinical conditions associated with KREMEN1.

[56321] Kinase suppressor of ras (KSR, Accession XP_290793.1) is another GAM7957 target gene, herein designated TARGET GENE. KSR BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by KSR, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KSR BINDING SITE, designated SEQ ID:3327, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56322] Another function of GAM7957 is therefore inhibition of Kinase suppressor of ras (KSR, Accession XP_290793.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KSR.

[56323] Lysosomal-associated membrane protein 2 (LAMP2, Accession NP_054701.1) is another GAM7957 target gene, herein designated TARGET GENE. LAMP2 BINDING SITE1 and LAMP2 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by LAMP2, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III

of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LAMP2 BINDING SITE1 and LAMP2 BINDING SITE2, designated SEQ ID:10440 and SEQ ID:2602 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56324] Another function of GAM7957 is therefore inhibition of Lysosomal-associated membrane protein 2 (LAMP2, Accession NP_054701.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LAMP2.

[56325] LANO (Accession NP_079444.1) is another GAM7957 target gene, herein designated TARGET GENE. LANO BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by LANO, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LANO BINDING SITE, designated SEQ ID:4084, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56326] Another function of GAM7957 is therefore inhibition of LANO (Accession NP_079444.1) . Accordingly, utilities of

GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LANO.

[56327] LAP1B (Accession NP_056417.1) is another GAM7957 target gene, herein designated TARGET GENE. LAP1B BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LAP1B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LAP1B BINDING SITE, designated SEQ ID:948, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56328] Another function of GAM7957 is therefore inhibition of LAP1B (Accession NP_056417.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LAP1B.

[56329] Lim and sh3 protein 1 (LASP1, Accession NP_006139.1) is another GAM7957 target gene, herein designated TARGET GENE. LASP1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LASP1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide se-

quences of LASP1 BINDING SITE, designated SEQ ID:9055, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56330] Another function of GAM7957 is therefore inhibition of Lim and sh3 protein 1 (LASP1, Accession NP_006139.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LASP1.

[56331] Lim domain binding 3 (LDB3, Accession XP_084376.6) is another GAM7957 target gene, herein designated TARGET GENE. LDB3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LDB3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LDB3 BINDING SITE, designated SEQ ID:14268, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56332] Another function of GAM7957 is therefore inhibition of Lim domain binding 3 (LDB3, Accession XP_084376.6), a gene which could play a role during mating. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated

with LDB3.

[56333] The function of LDB3 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM40.1. Low density lipoprotein receptor (familial hypercholesterolemia) (LDLR, Accession NP_000518.1) is another GAM7957 target gene, herein designated TARGET GENE. LDLR BINDING SITE1 through LDLR BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by LDLR, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LDLR BINDING SITE1 through LDLR BINDING SITE3, designated SEQ ID:4260, SEQ ID:8019 and SEQ ID:4880 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56334] Another function of GAM7957 is therefore inhibition of Low density lipoprotein receptor (familial hypercholesterolemia) (LDLR, Accession NP_000518.1), a gene which also acts as a tumor suppressor. and therefore is associated with Familial hypercholesterolemia. Accordingly, utilities of GAM7957 include diagnosis, prevention and treat-

ment of Familial hypercholesterolemia, and of other diseases and clinical conditions associated with LDLR.

[56335] The function of LDLR and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM99.1. Leptin (obesity homolog, mouse) (LEP, Accession NP_000221.1) is another GAM7957 target gene, herein designated TARGET GENE. LEP BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LEP, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LEP BINDING SITE, designated SEQ ID:5562, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56336] Another function of GAM7957 is therefore inhibition of Leptin (obesity homolog, mouse) (LEP, Accession NP_000221.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LEP.

[56337] Leukocyte immunoglobulin-like receptor, subfamily b (with tm and itim domains), member 1 (LILRB1, Accession

NP_006660.1) is another GAM7957 target gene, herein designated TARGET GENE. LILRB1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LILRB1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LILRB1 BINDING SITE, designated SEQ ID:7591, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56338] Another function of GAM7957 is therefore inhibition of Leukocyte immunoglobulin-like receptor, subfamily b (with tm and itim domains), member 1 (LILRB1, Accession NP_006660.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LILRB1.

[56339] LIM (Accession NP_006448.1) is another GAM7957 target gene, herein designated TARGET GENE. LIM BINDING SITE1 and LIM BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LIM, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

LIM BINDING SITE1 and LIM BINDING SITE2, designated SEQ ID:15993 and SEQ ID:1052 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56340] Another function of GAM7957 is therefore inhibition of LIM (Accession NP_006448.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LIM.

[56341] Lamin b2 (LMNB2, Accession NP_116126.2) is another GAM7957 target gene, herein designated TARGET GENE. LMNB2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LMNB2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LMNB2 BINDING SITE, designated SEQ ID:5883, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56342] Another function of GAM7957 is therefore inhibition of Lamin b2 (LMNB2, Accession NP_116126.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LMNB2.

[56343] Leiomodin 1 (smooth muscle) (LMOD1, Accession NP_036266.1) is another GAM7957 target gene, herein designated TARGET GENE. LMOD1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LMOD1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LMOD1 BINDING SITE, designated SEQ ID:6842, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56344] Another function of GAM7957 is therefore inhibition of Leiomodin 1 (smooth muscle) (LMOD1, Accession NP_036266.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LMOD1.

[56345] Leiomodin 3 (fetal) (LMOD3, Accession XP_067529.3) is another GAM7957 target gene, herein designated TARGET GENE. LMOD3 BINDING SITE1 and LMOD3 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LMOD3, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementar-

ity of the nucleotide sequences of LMOD3 BINDING SITE1 and LMOD3 BINDING SITE2, designated SEQ ID:15089 and SEQ ID:14217 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56346] Another function of GAM7957 is therefore inhibition of Leiomodrin 3 (fetal) (LMOD3, Accession XP_067529.3) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LMOD3.

[56347] LOC112687 (Accession XP_053145.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC112687 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC112687, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC112687 BINDING SITE, designated SEQ ID:7318, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56348] Another function of GAM7957 is therefore inhibition of LOC112687 (Accession XP_053145.1) . Accordingly, utili-

ties of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC112687.

[56349] LOC112885 (Accession NP_612424.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC112885 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC112885, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC112885 BINDING SITE, designated SEQ ID:12290, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56350] Another function of GAM7957 is therefore inhibition of LOC112885 (Accession NP_612424.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC112885.

[56351] LOC114987 (Accession NP_660284.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC114987 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by

LOC114987, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC114987 BINDING SITE, designated SEQ ID:9417, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56352] Another function of GAM7957 is therefore inhibition of LOC114987 (Accession NP_660284.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC114987.

[56353] LOC115004 (Accession XP_291162.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC115004 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC115004, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC115004 BINDING SITE, designated SEQ ID:9418, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56354] Another function of GAM7957 is therefore inhibition of LOC115004 (Accession XP_291162.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC115004.

[56355] LOC115129 (Accession XP_055292.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC115129 BINDING SITE1 through LOC115129 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC115129, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC115129 BINDING SITE1 through LOC115129 BINDING SITE3, designated SEQ ID:1418, SEQ ID:1147 and SEQ ID:9914 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56356] Another function of GAM7957 is therefore inhibition of LOC115129 (Accession XP_055292.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC115129.

[56357] LOC115704 (Accession NP_660288.1) is another

GAM7957 target gene, herein designated TARGET GENE. LOC115704 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC115704, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC115704 BINDING SITE, designated SEQ ID:13386, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56358] Another function of GAM7957 is therefore inhibition of LOC115704 (Accession NP_660288.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC115704.

[56359] LOC116143 (Accession NP_612467.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC116143 BINDING SITE1 and LOC116143 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC116143, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC116143

BINDING SITE1 and LOC116143 BINDING SITE2, designated SEQ ID:3378 and SEQ ID:9421 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56360] Another function of GAM7957 is therefore inhibition of LOC116143 (Accession NP_612467.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC116143.

[56361] LOC116228 (Accession XP_300752.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC116228 BINDING SITE1 and LOC116228 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC116228, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC116228 BINDING SITE1 and LOC116228 BINDING SITE2, designated SEQ ID:1671 and SEQ ID:12210 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56362] Another function of GAM7957 is therefore inhibition of LOC116228 (Accession XP_300752.1) . Accordingly, utili-

ties of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC116228.

[56363] LOC116236 (Accession XP_057674.5) is another GAM7957 target gene, herein designated TARGET GENE. LOC116236 BINDING SITE1 and LOC116236 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC116236, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC116236 BINDING SITE1 and LOC116236 BINDING SITE2, designated SEQ ID:2487 and SEQ ID:18886 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56364] Another function of GAM7957 is therefore inhibition of LOC116236 (Accession XP_057674.5) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC116236.

[56365] LOC116349 (Accession XP_057993.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC116349 BINDING SITE1 and LOC116349 BINDING

SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC116349, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC116349 BINDING SITE1 and LOC116349 BINDING SITE2, designated SEQ ID:10572 and SEQ ID:13155 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56366] Another function of GAM7957 is therefore inhibition of LOC116349 (Accession XP_057993.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC116349.

[56367] LOC118709 (Accession XP_058338.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC118709 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC118709, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC118709 BINDING SITE, designated SEQ ID:11340, to the nucleotide sequence of

GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56368] Another function of GAM7957 is therefore inhibition of LOC118709 (Accession XP_058338.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC118709.

[56369] LOC120224 (Accession NP_620143.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC120224 BINDING SITE1 and LOC120224 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC120224, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC120224 BINDING SITE1 and LOC120224 BINDING SITE2, designated SEQ ID:10567 and SEQ ID:20099 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56370] Another function of GAM7957 is therefore inhibition of LOC120224 (Accession NP_620143.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC120224.

[56371] LOC120406 (Accession XP_061976.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC120406 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC120406, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC120406 BINDING SITE, designated SEQ ID:10342, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56372] Another function of GAM7957 is therefore inhibition of LOC120406 (Accession XP_061976.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC120406.

[56373] LOC121456 (Accession XP_062645.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC121456 BINDING SITE1 and LOC121456 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC121456, corresponding to target binding sites such as BINDING SITE I, BINDING SITE

II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC121456 BINDING SITE1 and LOC121456 BINDING SITE2, designated SEQ ID:3524 and SEQ ID:957 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56374] Another function of GAM7957 is therefore inhibition of LOC121456 (Accession XP_062645.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC121456.

[56375] LOC122704 (Accession XP_058647.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC122704 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC122704, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC122704 BINDING SITE, designated SEQ ID:6651, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56376] Another function of GAM7957 is therefore inhibition of

LOC122704 (Accession XP_058647.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC122704.

[56377] LOC123722 (Accession XP_058721.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC123722 BINDING SITE1 through LOC123722 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC123722, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC123722 BINDING SITE1 through LOC123722 BINDING SITE3, designated SEQ ID:15675, SEQ ID:13155 and SEQ ID:5759 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56378] Another function of GAM7957 is therefore inhibition of LOC123722 (Accession XP_058721.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC123722.

[56379] LOC124411 (Accession XP_058804.4) is another GAM7957 target gene, herein designated TARGET GENE.

LOC124411 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC124411, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC124411 BINDING SITE, designated SEQ ID:12083, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56380] Another function of GAM7957 is therefore inhibition of LOC124411 (Accession XP_058804.4) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC124411.

[56381] LOC124751 (Accession XP_064298.4) is another GAM7957 target gene, herein designated TARGET GENE. LOC124751 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC124751, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC124751 BINDING SITE, designated SEQ ID:12792, to the nucleotide sequence of

GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56382] Another function of GAM7957 is therefore inhibition of LOC124751 (Accession XP_064298.4) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC124751.

[56383] LOC126167 (Accession XP_058997.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC126167 BINDING SITE1 and LOC126167 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC126167, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC126167 BINDING SITE1 and LOC126167 BINDING SITE2, designated SEQ ID:5860 and SEQ ID:12793 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56384] Another function of GAM7957 is therefore inhibition of LOC126167 (Accession XP_058997.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC126167.

[56385] LOC126669 (Accession XP_060121.4) is another GAM7957 target gene, herein designated TARGET GENE. LOC126669 BINDING SITE1 and LOC126669 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC126669, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC126669 BINDING SITE1 and LOC126669 BINDING SITE2, designated SEQ ID:14979 and SEQ ID:6238 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56386] Another function of GAM7957 is therefore inhibition of LOC126669 (Accession XP_060121.4) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC126669.

[56387] LOC127262 (Accession XP_072073.5) is another GAM7957 target gene, herein designated TARGET GENE. LOC127262 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC127262, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC127262 BINDING SITE, designated SEQ ID:5861, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56388] Another function of GAM7957 is therefore inhibition of LOC127262 (Accession XP_072073.5) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC127262.

[56389] LOC130026 (Accession NP_612477.3) is another GAM7957 target gene, herein designated TARGET GENE. LOC130026 BINDING SITE1 and LOC130026 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC130026, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC130026 BINDING SITE1 and LOC130026 BINDING SITE2, designated SEQ ID:2487 and SEQ ID:3640 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56390] Another function of GAM7957 is therefore inhibition of LOC130026 (Accession NP_612477.3) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC130026.

[56391] LOC130589 (Accession NP_620156.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC130589 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC130589, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC130589 BINDING SITE, designated SEQ ID:17423, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56392] Another function of GAM7957 is therefore inhibition of LOC130589 (Accession NP_620156.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC130589.

[56393] LOC133926 (Accession XP_059674.1) is another GAM7957 target gene, herein designated TARGET GENE.

LOC133926 BINDING SITE1 and LOC133926 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC133926, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC133926 BINDING SITE1 and LOC133926 BINDING SITE2, designated SEQ ID:12792 and SEQ ID:13155 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56394] Another function of GAM7957 is therefore inhibition of LOC133926 (Accession XP_059674.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC133926.

[56395] LOC134121 (Accession XP_059692.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC134121 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC134121, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC134121 BINDING SITE, design-

nated SEQ ID:8199, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56396] Another function of GAM7957 is therefore inhibition of LOC134121 (Accession XP_059692.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC134121.

[56397] LOC134147 (Accession NP_620164.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC134147 BINDING SITE1 and LOC134147 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC134147, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC134147 BINDING SITE1 and LOC134147 BINDING SITE2, designated SEQ ID:1453 and SEQ ID:9760 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56398] Another function of GAM7957 is therefore inhibition of LOC134147 (Accession NP_620164.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC134147.

[56399] LOC136263 (Accession NP_660311.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC136263 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC136263, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC136263 BINDING SITE, designated SEQ ID:15223, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56400] Another function of GAM7957 is therefore inhibition of LOC136263 (Accession NP_660311.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC136263.

[56401] LOC138428 (Accession XP_059972.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC138428 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC138428, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC138428 BINDING SITE, designated SEQ ID:10454, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56402] Another function of GAM7957 is therefore inhibition of LOC138428 (Accession XP_059972.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC138428.

[56403] LOC139422 (Accession XP_066687.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC139422 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC139422, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC139422 BINDING SITE, designated SEQ ID:5043, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56404] Another function of GAM7957 is therefore inhibition of

LOC139422 (Accession XP_066687.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC139422.

[56405] LOC139562 (Accession XP_066765.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC139562 BINDING SITE1 through LOC139562 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC139562, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC139562 BINDING SITE1 through LOC139562 BINDING SITE3, designated SEQ ID:7773, SEQ ID:7063 and SEQ ID:7286 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56406] Another function of GAM7957 is therefore inhibition of LOC139562 (Accession XP_066765.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC139562.

[56407] LOC142779 (Accession XP_084337.1) is another GAM7957 target gene, herein designated TARGET GENE.

LOC142779 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC142779, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC142779 BINDING SITE, designated SEQ ID:5071, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56408] Another function of GAM7957 is therefore inhibition of LOC142779 (Accession XP_084337.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC142779.

[56409] LOC142826 (Accession XP_084355.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC142826 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC142826, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC142826 BINDING SITE, designated SEQ ID:15983, to the nucleotide sequence of

GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56410] Another function of GAM7957 is therefore inhibition of LOC142826 (Accession XP_084355.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC142826.

[56411] LOC142948 (Accession XP_096364.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC142948 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC142948, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC142948 BINDING SITE, designated SEQ ID:8865, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56412] Another function of GAM7957 is therefore inhibition of LOC142948 (Accession XP_096364.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC142948.

[56413] LOC144481 (Accession XP_096611.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC144481 BINDING SITE1 and LOC144481 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC144481, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC144481 BINDING SITE1 and LOC144481 BINDING SITE2, designated SEQ ID:1996 and SEQ ID:10867 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56414] Another function of GAM7957 is therefore inhibition of LOC144481 (Accession XP_096611.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC144481.

[56415] LOC144817 (Accession XP_084972.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC144817 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC144817, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC144817 BINDING SITE, designated SEQ ID:12140, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56416] Another function of GAM7957 is therefore inhibition of LOC144817 (Accession XP_084972.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC144817.

[56417] LOC144845 (Accession NP_612483.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC144845 BINDING SITE1 and LOC144845 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC144845, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC144845 BINDING SITE1 and LOC144845 BINDING SITE2, designated SEQ ID:12559 and SEQ ID:3092 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56418] Another function of GAM7957 is therefore inhibition of

LOC144845 (Accession NP_612483.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC144845.

[56419] LOC145216 (Accession XP_096730.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC145216 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC145216, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC145216 BINDING SITE, designated SEQ ID:10554, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56420] Another function of GAM7957 is therefore inhibition of LOC145216 (Accession XP_096730.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC145216.

[56421] LOC145231 (Accession XP_096740.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC145231 BINDING SITE1 through LOC145231 BINDING

SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC145231, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC145231 BINDING SITE1 through LOC145231 BINDING SITE3, designated SEQ ID:16122, SEQ ID:15089 and SEQ ID:19055 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56422] Another function of GAM7957 is therefore inhibition of LOC145231 (Accession XP_096740.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC145231.

[56423] LOC145387 (Accession XP_096791.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC145387 BINDING SITE1 and LOC145387 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC145387, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC145387

BINDING SITE1 and LOC145387 BINDING SITE2, designated SEQ ID:14786 and SEQ ID:2001 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56424] Another function of GAM7957 is therefore inhibition of LOC145387 (Accession XP_096791.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC145387.

[56425] LOC145453 (Accession XP_085120.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC145453 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC145453, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC145453 BINDING SITE, designated SEQ ID:10439, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56426] Another function of GAM7957 is therefore inhibition of LOC145453 (Accession XP_085120.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC145453.

[56427] LOC145609 (Accession XP_096817.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC145609 BINDING SITE1 and LOC145609 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC145609, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC145609 BINDING SITE1 and LOC145609 BINDING SITE2, designated SEQ ID:5360 and SEQ ID:15343 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56428] Another function of GAM7957 is therefore inhibition of LOC145609 (Accession XP_096817.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC145609.

[56429] LOC145663 (Accession XP_096829.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC145663 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by

LOC145663, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC145663 BINDING SITE, designated SEQ ID:13155, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56430] Another function of GAM7957 is therefore inhibition of LOC145663 (Accession XP_096829.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC145663.

[56431] LOC145693 (Accession XP_085205.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC145693 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC145693, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC145693 BINDING SITE, designated SEQ ID:15903, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56432] Another function of GAM7957 is therefore inhibition of LOC145693 (Accession XP_085205.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC145693.

[56433] LOC145757 (Accession XP_085227.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC145757 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC145757, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC145757 BINDING SITE, designated SEQ ID:11897, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56434] Another function of GAM7957 is therefore inhibition of LOC145757 (Accession XP_085227.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC145757.

[56435] LOC145758 (Accession XP_096858.1) is another GAM7957 target gene, herein designated TARGET GENE.

LOC145758 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC145758, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC145758 BINDING SITE, designated SEQ ID:6791, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56436] Another function of GAM7957 is therefore inhibition of LOC145758 (Accession XP_096858.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC145758.

[56437] LOC145820 (Accession XP_085246.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC145820 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC145820, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC145820 BINDING SITE, designated SEQ ID:15343, to the nucleotide sequence of

GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56438] Another function of GAM7957 is therefore inhibition of LOC145820 (Accession XP_085246.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC145820.

[56439] LOC146229 (Accession XP_085387.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC146229 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC146229, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC146229 BINDING SITE, designated SEQ ID:19900, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56440] Another function of GAM7957 is therefore inhibition of LOC146229 (Accession XP_085387.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC146229.

[56441] LOC146336 (Accession XP_085421.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC146336 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC146336, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC146336 BINDING SITE, designated SEQ ID:18065, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56442] Another function of GAM7957 is therefore inhibition of LOC146336 (Accession XP_085421.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC146336.

[56443] LOC146713 (Accession XP_097071.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC146713 BINDING SITE1 and LOC146713 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC146713, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the com-

plementarity of the nucleotide sequences of LOC146713 BINDING SITE1 and LOC146713 BINDING SITE2, designated SEQ ID:10438 and SEQ ID:14497 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56444] Another function of GAM7957 is therefore inhibition of LOC146713 (Accession XP_097071.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC146713.

[56445] LOC146728 (Accession XP_097074.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC146728 BINDING SITE1 and LOC146728 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC146728, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC146728 BINDING SITE1 and LOC146728 BINDING SITE2, designated SEQ ID:17996 and SEQ ID:9770 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56446] Another function of GAM7957 is therefore inhibition of

LOC146728 (Accession XP_097074.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC146728.

[56447] LOC146756 (Accession XP_097085.5) is another GAM7957 target gene, herein designated TARGET GENE. LOC146756 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC146756, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC146756 BINDING SITE, designated SEQ ID:15343, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56448] Another function of GAM7957 is therefore inhibition of LOC146756 (Accession XP_097085.5) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC146756.

[56449] LOC146895 (Accession XP_097120.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC146895 BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by LOC146895, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC146895 BINDING SITE, designated SEQ ID:4338, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56450] Another function of GAM7957 is therefore inhibition of LOC146895 (Accession XP_097120.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC146895.

[56451] LOC146901 (Accession XP_097121.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC146901 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC146901, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC146901 BINDING SITE, designated SEQ ID:1262, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also design-

nated SEQ ID:297.

[56452] Another function of GAM7957 is therefore inhibition of LOC146901 (Accession XP_097121.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC146901.

[56453] LOC146958 (Accession XP_097142.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC146958 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC146958, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC146958 BINDING SITE, designated SEQ ID:12758, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56454] Another function of GAM7957 is therefore inhibition of LOC146958 (Accession XP_097142.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC146958.

[56455] LOC147071 (Accession XP_054031.5) is another

GAM7957 target gene, herein designated TARGET GENE. LOC147071 BINDING SITE1 and LOC147071 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC147071, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC147071 BINDING SITE1 and LOC147071 BINDING SITE2, designated SEQ ID:609 and SEQ ID:13155 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56456] Another function of GAM7957 is therefore inhibition of LOC147071 (Accession XP_054031.5) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC147071.

[56457] LOC147080 (Accession XP_097182.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC147080 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC147080, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC147080 BINDING SITE, designated SEQ ID:9281, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56458] Another function of GAM7957 is therefore inhibition of LOC147080 (Accession XP_097182.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC147080.

[56459] LOC147093 (Accession XP_097184.4) is another GAM7957 target gene, herein designated TARGET GENE. LOC147093 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC147093, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC147093 BINDING SITE, designated SEQ ID:6900, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56460] Another function of GAM7957 is therefore inhibition of LOC147093 (Accession XP_097184.4) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC147093.

[56461] LOC147645 (Accession XP_085831.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC147645 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC147645, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC147645 BINDING SITE, designated SEQ ID:10707, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56462] Another function of GAM7957 is therefore inhibition of LOC147645 (Accession XP_085831.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC147645.

[56463] LOC147649 (Accession XP_085830.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC147649 BINDING SITE1 and LOC147649 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC147649, corresponding to

target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC147649 BINDING SITE1 and LOC147649 BINDING SITE2, designated SEQ ID:2487 and SEQ ID:13155 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56464] Another function of GAM7957 is therefore inhibition of LOC147649 (Accession XP_085830.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC147649.

[56465] LOC147669 (Accession XP_097262.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC147669 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC147669, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC147669 BINDING SITE, designated SEQ ID:472, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56466] Another function of GAM7957 is therefore inhibition of LOC147669 (Accession XP_097262.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC147669.

[56467] LOC147727 (Accession XP_085862.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC147727 BINDING SITE1 through LOC147727 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC147727, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC147727 BINDING SITE1 through LOC147727 BINDING SITE3, designated SEQ ID:630, SEQ ID:16906 and SEQ ID:19057 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56468] Another function of GAM7957 is therefore inhibition of LOC147727 (Accession XP_085862.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC147727.

[56469] LOC147791 (Accession XP_097293.2) is another

GAM7957 target gene, herein designated TARGET GENE. LOC147791 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC147791, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC147791 BINDING SITE, designated SEQ ID:12969, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56470] Another function of GAM7957 is therefore inhibition of LOC147791 (Accession XP_097293.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC147791.

[56471] LOC147837 (Accession NP_660319.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC147837 BINDING SITE1 and LOC147837 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC147837, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC147837

BINDING SITE1 and LOC147837 BINDING SITE2, designated SEQ ID:4707 and SEQ ID:18983 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56472] Another function of GAM7957 is therefore inhibition of LOC147837 (Accession NP_660319.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC147837.

[56473] LOC147947 (Accession XP_085974.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC147947 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC147947, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC147947 BINDING SITE, designated SEQ ID:14271, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56474] Another function of GAM7957 is therefore inhibition of LOC147947 (Accession XP_085974.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC147947.

[56475] LOC148137 (Accession NP_653293.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC148137 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC148137, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC148137 BINDING SITE, designated SEQ ID:10028, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56476] Another function of GAM7957 is therefore inhibition of LOC148137 (Accession NP_653293.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC148137.

[56477] LOC148166 (Accession XP_086077.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC148166 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC148166, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC148166 BINDING SITE, designated SEQ ID:5018, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56478] Another function of GAM7957 is therefore inhibition of LOC148166 (Accession XP_086077.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC148166.

[56479] LOC148198 (Accession XP_047554.4) is another GAM7957 target gene, herein designated TARGET GENE. LOC148198 BINDING SITE1 and LOC148198 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC148198, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC148198 BINDING SITE1 and LOC148198 BINDING SITE2, designated SEQ ID:10436 and SEQ ID:1492 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56480] Another function of GAM7957 is therefore inhibition of LOC148198 (Accession XP_047554.4) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC148198.

[56481] LOC148206 (Accession XP_086096.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC148206 BINDING SITE1 and LOC148206 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC148206, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC148206 BINDING SITE1 and LOC148206 BINDING SITE2, designated SEQ ID:17263 and SEQ ID:17399 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56482] Another function of GAM7957 is therefore inhibition of LOC148206 (Accession XP_086096.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC148206.

[56483] LOC148918 (Accession XP_086361.1) is another

GAM7957 target gene, herein designated TARGET GENE. LOC148918 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC148918, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC148918 BINDING SITE, designated SEQ ID:9014, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56484] Another function of GAM7957 is therefore inhibition of LOC148918 (Accession XP_086361.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC148918.

[56485] LOC149194 (Accession XP_086458.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC149194 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC149194, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC149194 BINDING SITE, design-

nated SEQ ID:13065, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56486] Another function of GAM7957 is therefore inhibition of LOC149194 (Accession XP_086458.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC149194.

[56487] LOC149271 (Accession XP_086475.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC149271 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC149271, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC149271 BINDING SITE, designated SEQ ID:17044, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56488] Another function of GAM7957 is therefore inhibition of LOC149271 (Accession XP_086475.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC149271.

[56489] LOC149448 (Accession XP_097642.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC149448 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC149448, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC149448 BINDING SITE, designated SEQ ID:13110, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56490] Another function of GAM7957 is therefore inhibition of LOC149448 (Accession XP_097642.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC149448.

[56491] LOC149464 (Accession XP_097645.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC149464 BINDING SITE1 and LOC149464 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC149464, corresponding to target binding sites such as BINDING SITE I, BINDING SITE

II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC149464 BINDING SITE1 and LOC149464 BINDING SITE2, designated SEQ ID:17317 and SEQ ID:1492 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56492] Another function of GAM7957 is therefore inhibition of LOC149464 (Accession XP_097645.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC149464.

[56493] LOC149506 (Accession XP_097661.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC149506 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC149506, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC149506 BINDING SITE, designated SEQ ID:6656, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56494] Another function of GAM7957 is therefore inhibition of

LOC149506 (Accession XP_097661.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC149506.

[56495] LOC149672 (Accession XP_086669.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC149672 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC149672, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC149672 BINDING SITE, designated SEQ ID:18837, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56496] Another function of GAM7957 is therefore inhibition of LOC149672 (Accession XP_086669.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC149672.

[56497] LOC149705 (Accession XP_097711.4) is another GAM7957 target gene, herein designated TARGET GENE. LOC149705 BINDING SITE1 and LOC149705 BINDING

SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC149705, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC149705 BINDING SITE1 and LOC149705 BINDING SITE2, designated SEQ ID:5361 and SEQ ID:6755 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56498] Another function of GAM7957 is therefore inhibition of LOC149705 (Accession XP_097711.4) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC149705.

[56499] LOC150095 (Accession XP_097805.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC150095 BINDING SITE1 and LOC150095 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC150095, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC150095 BINDING SITE1 and LOC150095 BINDING SITE2, design-

nated SEQ ID:2125 and SEQ ID:18254 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56500] Another function of GAM7957 is therefore inhibition of LOC150095 (Accession XP_097805.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC150095.

[56501] LOC150150 (Accession XP_097820.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC150150 BINDING SITE1 and LOC150150 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC150150, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC150150 BINDING SITE1 and LOC150150 BINDING SITE2, designated SEQ ID:2222 and SEQ ID:16255 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56502] Another function of GAM7957 is therefore inhibition of LOC150150 (Accession XP_097820.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC150150.

[56503] LOC150174 (Accession XP_086802.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC150174 BINDING SITE1 and LOC150174 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC150174, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC150174 BINDING SITE1 and LOC150174 BINDING SITE2, designated SEQ ID:6243 and SEQ ID:14331 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56504] Another function of GAM7957 is therefore inhibition of LOC150174 (Accession XP_086802.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC150174.

[56505] LOC150212 (Accession XP_086827.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC150212 BINDING SITE1 through LOC150212 BINDING SITE5 are target binding sites found in untranslated re-

gions of mRNA encoded by LOC150212, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC150212 BINDING SITE1 through LOC150212 BINDING SITE5, designated SEQ ID:3584, SEQ ID:2979, SEQ ID:5019, SEQ ID:17190 and SEQ ID:19451 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56506] Another function of GAM7957 is therefore inhibition of LOC150212 (Accession XP_086827.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC150212.

[56507] LOC150213 (Accession XP_059324.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC150213 BINDING SITE1 and LOC150213 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC150213, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC150213 BINDING SITE1 and LOC150213 BINDING SITE2, design-

nated SEQ ID:14331 and SEQ ID:6243 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56508] Another function of GAM7957 is therefore inhibition of LOC150213 (Accession XP_059324.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC150213.

[56509] LOC150225 (Accession XP_097870.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC150225 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC150225, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC150225 BINDING SITE, designated SEQ ID:9421, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56510] Another function of GAM7957 is therefore inhibition of LOC150225 (Accession XP_097870.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC150225.

[56511] LOC150271 (Accession XP_097859.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC150271 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC150271, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC150271 BINDING SITE, designated SEQ ID:13945, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56512] Another function of GAM7957 is therefore inhibition of LOC150271 (Accession XP_097859.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC150271.

[56513] LOC150279 (Accession XP_086820.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC150279 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC150279, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC150279 BINDING SITE, designated SEQ ID:6687, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56514] Another function of GAM7957 is therefore inhibition of LOC150279 (Accession XP_086820.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC150279.

[56515] LOC150299 (Accession XP_097869.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC150299 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC150299, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC150299 BINDING SITE, designated SEQ ID:6090, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56516] Another function of GAM7957 is therefore inhibition of LOC150299 (Accession XP_097869.2) . Accordingly, utili-

ties of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC150299.

[56517] LOC150630 (Accession XP_097931.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC150630 BINDING SITE1 and LOC150630 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC150630, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC150630 BINDING SITE1 and LOC150630 BINDING SITE2, designated SEQ ID:4127 and SEQ ID:7317 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56518] Another function of GAM7957 is therefore inhibition of LOC150630 (Accession XP_097931.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC150630.

[56519] LOC150933 (Accession XP_097971.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC150933 BINDING SITE is a target binding site found in

the 5' untranslated region of mRNA encoded by LOC150933, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC150933 BINDING SITE, designated SEQ ID:17018, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56520] Another function of GAM7957 is therefore inhibition of LOC150933 (Accession XP_097971.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC150933.

[56521] LOC151146 (Accession XP_087106.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC151146 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC151146, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC151146 BINDING SITE, designated SEQ ID:20012, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also design-

nated SEQ ID:297.

[56522] Another function of GAM7957 is therefore inhibition of LOC151146 (Accession XP_087106.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC151146.

[56523] LOC151194 (Accession NP_660323.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC151194 BINDING SITE1 and LOC151194 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC151194, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC151194 BINDING SITE1 and LOC151194 BINDING SITE2, designated SEQ ID:9002 and SEQ ID:9420 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56524] Another function of GAM7957 is therefore inhibition of LOC151194 (Accession NP_660323.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC151194.

[56525] LOC151623 (Accession XP_098096.5) is another GAM7957 target gene, herein designated TARGET GENE. LOC151623 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC151623, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC151623 BINDING SITE, designated SEQ ID:5532, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56526] Another function of GAM7957 is therefore inhibition of LOC151623 (Accession XP_098096.5) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC151623.

[56527] LOC151720 (Accession XP_087279.6) is another GAM7957 target gene, herein designated TARGET GENE. LOC151720 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC151720, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC151720 BINDING SITE, designated SEQ ID:16954, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56528] Another function of GAM7957 is therefore inhibition of LOC151720 (Accession XP_087279.6) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC151720.

[56529] LOC152024 (Accession XP_087365.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC152024 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC152024, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC152024 BINDING SITE, designated SEQ ID:10971, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56530] Another function of GAM7957 is therefore inhibition of LOC152024 (Accession XP_087365.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC152024.

[56531] LOC152445 (Accession XP_098231.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC152445 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC152445, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC152445 BINDING SITE, designated SEQ ID:10654, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56532] Another function of GAM7957 is therefore inhibition of LOC152445 (Accession XP_098231.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC152445.

[56533] LOC152627 (Accession XP_087495.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC152627 BINDING SITE1 and LOC152627 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC152627, corresponding to

target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC152627 BINDING SITE1 and LOC152627 BINDING SITE2, designated SEQ ID:19899 and SEQ ID:7628 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56534] Another function of GAM7957 is therefore inhibition of LOC152627 (Accession XP_087495.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC152627.

[56535] LOC152804 (Accession XP_098266.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC152804 BINDING SITE1 and LOC152804 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC152804, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC152804 BINDING SITE1 and LOC152804 BINDING SITE2, designated SEQ ID:13066 and SEQ ID:14782 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated

GAM RNA, also designated SEQ ID:297.

[56536] Another function of GAM7957 is therefore inhibition of LOC152804 (Accession XP_098266.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC152804.

[56537] LOC152829 (Accession XP_087532.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC152829 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC152829, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC152829 BINDING SITE, designated SEQ ID:11843, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56538] Another function of GAM7957 is therefore inhibition of LOC152829 (Accession XP_087532.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC152829.

[56539] LOC153077 (Accession XP_098307.1) is another

GAM7957 target gene, herein designated TARGET GENE. LOC153077 BINDING SITE1 and LOC153077 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC153077, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC153077 BINDING SITE1 and LOC153077 BINDING SITE2, designated SEQ ID:15345 and SEQ ID:16654 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56540] Another function of GAM7957 is therefore inhibition of LOC153077 (Accession XP_098307.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC153077.

[56541] LOC153146 (Accession XP_098319.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC153146 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC153146, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC153146 BINDING SITE, designated SEQ ID:13434, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56542] Another function of GAM7957 is therefore inhibition of LOC153146 (Accession XP_098319.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC153146.

[56543] LOC153338 (Accession XP_098361.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC153338 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC153338, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC153338 BINDING SITE, designated SEQ ID:14393, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56544] Another function of GAM7957 is therefore inhibition of LOC153338 (Accession XP_098361.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC153338.

[56545] LOC153561 (Accession XP_087708.6) is another GAM7957 target gene, herein designated TARGET GENE. LOC153561 BINDING SITE1 and LOC153561 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC153561, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC153561 BINDING SITE1 and LOC153561 BINDING SITE2, designated SEQ ID:8646 and SEQ ID:8369 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56546] Another function of GAM7957 is therefore inhibition of LOC153561 (Accession XP_087708.6) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC153561.

[56547] LOC153682 (Accession XP_098414.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC153682 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by

LOC153682, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC153682 BINDING SITE, designated SEQ ID:609, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56548] Another function of GAM7957 is therefore inhibition of LOC153682 (Accession XP_098414.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC153682.

[56549] LOC153711 (Accession XP_098419.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC153711 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC153711, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC153711 BINDING SITE, designated SEQ ID:14924, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56550] Another function of GAM7957 is therefore inhibition of LOC153711 (Accession XP_098419.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC153711.

[56551] LOC153727 (Accession XP_098422.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC153727 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC153727, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC153727 BINDING SITE, designated SEQ ID:20181, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56552] Another function of GAM7957 is therefore inhibition of LOC153727 (Accession XP_098422.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC153727.

[56553] LOC154739 (Accession XP_098602.1) is another GAM7957 target gene, herein designated TARGET GENE.

LOC154739 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC154739, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC154739 BINDING SITE, designated SEQ ID:7965, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56554] Another function of GAM7957 is therefore inhibition of LOC154739 (Accession XP_098602.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC154739.

[56555] LOC154791 (Accession XP_088045.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC154791 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC154791, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC154791 BINDING SITE, designated SEQ ID:2550, to the nucleotide sequence of

GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56556] Another function of GAM7957 is therefore inhibition of LOC154791 (Accession XP_088045.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC154791.

[56557] LOC154877 (Accession XP_098626.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC154877 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC154877, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC154877 BINDING SITE, designated SEQ ID:9421, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56558] Another function of GAM7957 is therefore inhibition of LOC154877 (Accession XP_098626.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC154877.

[56559] LOC155006 (Accession XP_088117.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC155006 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC155006, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC155006 BINDING SITE, designated SEQ ID:15060, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56560] Another function of GAM7957 is therefore inhibition of LOC155006 (Accession XP_088117.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC155006.

[56561] LOC155054 (Accession XP_088140.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC155054 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC155054, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC155054 BINDING SITE, designated SEQ ID:1423, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56562] Another function of GAM7957 is therefore inhibition of LOC155054 (Accession XP_088140.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC155054.

[56563] LOC155072 (Accession XP_098661.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC155072 BINDING SITE1 through LOC155072 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC155072, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC155072 BINDING SITE1 through LOC155072 BINDING SITE3, designated SEQ ID:19036, SEQ ID:614 and SEQ ID:13155 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56564] Another function of GAM7957 is therefore inhibition of LOC155072 (Accession XP_098661.1) . Accordingly, utili-

ties of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC155072.

[56565] LOC155435 (Accession XP_088257.3) is another GAM7957 target gene, herein designated TARGET GENE. LOC155435 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC155435, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC155435 BINDING SITE, designated SEQ ID:1716, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56566] Another function of GAM7957 is therefore inhibition of LOC155435 (Accession XP_088257.3) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC155435.

[56567] LOC157278 (Accession XP_098741.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC157278 BINDING SITE1 and LOC157278 BINDING SITE2 are target binding sites found in untranslated re-

gions of mRNA encoded by LOC157278, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC157278 BINDING SITE1 and LOC157278 BINDING SITE2, designated SEQ ID:10646 and SEQ ID:15781 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56568] Another function of GAM7957 is therefore inhibition of LOC157278 (Accession XP_098741.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC157278.

[56569] LOC157570 (Accession XP_088331.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC157570 BINDING SITE1 through LOC157570 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC157570, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC157570 BINDING SITE1 through LOC157570 BINDING SITE3, designated SEQ ID:14946, SEQ ID:3765 and SEQ ID:13155 re-

spectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56570] Another function of GAM7957 is therefore inhibition of LOC157570 (Accession XP_088331.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC157570.

[56571] LOC157657 (Accession NP_808880.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC157657 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC157657, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC157657 BINDING SITE, designated SEQ ID:3676, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56572] Another function of GAM7957 is therefore inhibition of LOC157657 (Accession NP_808880.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC157657.

[56573] LOC157737 (Accession XP_098819.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC157737 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC157737, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC157737 BINDING SITE, designated SEQ ID:14124, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56574] Another function of GAM7957 is therefore inhibition of LOC157737 (Accession XP_098819.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC157737.

[56575] LOC157813 (Accession XP_098828.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC157813 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC157813, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC157813 BINDING SITE, designated SEQ ID:13066, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56576] Another function of GAM7957 is therefore inhibition of LOC157813 (Accession XP_098828.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC157813.

[56577] LOC157918 (Accession XP_098842.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC157918 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC157918, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC157918 BINDING SITE, designated SEQ ID:4539, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56578] Another function of GAM7957 is therefore inhibition of LOC157918 (Accession XP_098842.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC157918.

[56579] LOC157919 (Accession XP_088420.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC157919 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC157919, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC157919 BINDING SITE, designated SEQ ID:4539, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56580] Another function of GAM7957 is therefore inhibition of LOC157919 (Accession XP_088420.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC157919.

[56581] LOC158088 (Accession XP_098872.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC158088 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC158088, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC158088 BINDING SITE, designated SEQ ID:10572, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56582] Another function of GAM7957 is therefore inhibition of LOC158088 (Accession XP_098872.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC158088.

[56583] LOC158160 (Accession XP_054490.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC158160 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC158160, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC158160 BINDING SITE, designated SEQ ID:15220, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56584] Another function of GAM7957 is therefore inhibition of

LOC158160 (Accession XP_054490.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC158160.

[56585] LOC158187 (Accession XP_098892.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC158187 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC158187, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC158187 BINDING SITE, designated SEQ ID:13065, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56586] Another function of GAM7957 is therefore inhibition of LOC158187 (Accession XP_098892.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC158187.

[56587] LOC158819 (Accession XP_098995.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC158819 BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by LOC158819, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC158819 BINDING SITE, designated SEQ ID:9422, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56588] Another function of GAM7957 is therefore inhibition of LOC158819 (Accession XP_098995.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC158819.

[56589] LOC159053 (Accession XP_099021.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC159053 BINDING SITE1 and LOC159053 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC159053, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC159053 BINDING SITE1 and LOC159053 BINDING SITE2, designated SEQ ID:13155 and SEQ ID:17424 respectively, to the

nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56590] Another function of GAM7957 is therefore inhibition of LOC159053 (Accession XP_099021.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC159053.

[56591] LOC159110 (Accession XP_088753.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC159110 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC159110, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC159110 BINDING SITE, designated SEQ ID:18709, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56592] Another function of GAM7957 is therefore inhibition of LOC159110 (Accession XP_088753.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC159110.

[56593] LOC159176 (Accession XP_088768.3) is another GAM7957 target gene, herein designated TARGET GENE. LOC159176 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC159176, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC159176 BINDING SITE, designated SEQ ID:17699, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56594] Another function of GAM7957 is therefore inhibition of LOC159176 (Accession XP_088768.3) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC159176.

[56595] LOC161247 (Accession XP_090783.3) is another GAM7957 target gene, herein designated TARGET GENE. LOC161247 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC161247, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC161247 BINDING SITE, designated SEQ ID:5801, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56596] Another function of GAM7957 is therefore inhibition of LOC161247 (Accession XP_090783.3) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC161247.

[56597] LOC162968 (Accession XP_091892.3) is another GAM7957 target gene, herein designated TARGET GENE. LOC162968 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC162968, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC162968 BINDING SITE, designated SEQ ID:3275, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56598] Another function of GAM7957 is therefore inhibition of LOC162968 (Accession XP_091892.3) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC162968.

[56599] LOC163259 (Accession XP_088769.6) is another GAM7957 target gene, herein designated TARGET GENE. LOC163259 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC163259, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC163259 BINDING SITE, designated SEQ ID:17144, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56600] Another function of GAM7957 is therefore inhibition of LOC163259 (Accession XP_088769.6) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC163259.

[56601] LOC163556 (Accession XP_088979.6) is another GAM7957 target gene, herein designated TARGET GENE. LOC163556 BINDING SITE1 and LOC163556 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC163556, corresponding to

target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC163556 BINDING SITE1 and LOC163556 BINDING SITE2, designated SEQ ID:14783 and SEQ ID:11882 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56602] Another function of GAM7957 is therefore inhibition of LOC163556 (Accession XP_088979.6) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC163556.

[56603] LOC164580 (Accession XP_104562.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC164580 BINDING SITE1 and LOC164580 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC164580, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC164580 BINDING SITE1 and LOC164580 BINDING SITE2, designated SEQ ID:12796 and SEQ ID:15089 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated

GAM RNA, also designated SEQ ID:297.

[56604] Another function of GAM7957 is therefore inhibition of LOC164580 (Accession XP_104562.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC164580.

[56605] LOC165324 (Accession XP_092518.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC165324 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC165324, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC165324 BINDING SITE, designated SEQ ID:7877, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56606] Another function of GAM7957 is therefore inhibition of LOC165324 (Accession XP_092518.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC165324.

[56607] LOC166449 (Accession XP_093876.5) is another

GAM7957 target gene, herein designated TARGET GENE. LOC166449 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC166449, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC166449 BINDING SITE, designated SEQ ID:14199, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56608] Another function of GAM7957 is therefore inhibition of LOC166449 (Accession XP_093876.5) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC166449.

[56609] LOC166522 (Accession XP_093920.5) is another GAM7957 target gene, herein designated TARGET GENE. LOC166522 BINDING SITE1 and LOC166522 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC166522, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC166522

BINDING SITE1 and LOC166522 BINDING SITE2, designated SEQ ID:15343 and SEQ ID:4880 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56610] Another function of GAM7957 is therefore inhibition of LOC166522 (Accession XP_093920.5) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC166522.

[56611] LOC170393 (Accession NP_775812.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC170393 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC170393, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC170393 BINDING SITE, designated SEQ ID:17945, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56612] Another function of GAM7957 is therefore inhibition of LOC170393 (Accession NP_775812.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC170393.

[56613] LOC170394 (Accession XP_096329.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC170394 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC170394, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC170394 BINDING SITE, designated SEQ ID:4679, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56614] Another function of GAM7957 is therefore inhibition of LOC170394 (Accession XP_096329.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC170394.

[56615] LOC196214 (Accession XP_116897.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC196214 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC196214, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC196214 BINDING SITE, designated SEQ ID:16370, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56616] Another function of GAM7957 is therefore inhibition of LOC196214 (Accession XP_116897.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC196214.

[56617] LOC196540 (Accession XP_116933.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC196540 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC196540, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC196540 BINDING SITE, designated SEQ ID:18391, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56618] Another function of GAM7957 is therefore inhibition of

LOC196540 (Accession XP_116933.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC196540.

[56619] LOC197201 (Accession XP_113839.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC197201 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC197201, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC197201 BINDING SITE, designated SEQ ID:4083, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56620] Another function of GAM7957 is therefore inhibition of LOC197201 (Accession XP_113839.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC197201.

[56621] LOC197342 (Accession XP_113869.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC197342 BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by LOC197342, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC197342 BINDING SITE, designated SEQ ID:18190, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56622] Another function of GAM7957 is therefore inhibition of LOC197342 (Accession XP_113869.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC197342.

[56623] LOC199676 (Accession XP_117107.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC199676 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC199676, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC199676 BINDING SITE, designated SEQ ID:12792, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also design-

nated SEQ ID:297.

[56624] Another function of GAM7957 is therefore inhibition of LOC199676 (Accession XP_117107.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC199676.

[56625] LOC199858 (Accession XP_114040.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC199858 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC199858, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC199858 BINDING SITE, designated SEQ ID:15343, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56626] Another function of GAM7957 is therefore inhibition of LOC199858 (Accession XP_114040.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC199858.

[56627] LOC200298 (Accession XP_117217.2) is another

GAM7957 target gene, herein designated TARGET GENE. LOC200298 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC200298, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC200298 BINDING SITE, designated SEQ ID:14572, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56628] Another function of GAM7957 is therefore inhibition of LOC200298 (Accession XP_117217.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC200298.

[56629] LOC200731 (Accession XP_117268.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC200731 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC200731, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC200731 BINDING SITE, design-

nated SEQ ID:3813, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56630] Another function of GAM7957 is therefore inhibition of LOC200731 (Accession XP_117268.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC200731.

[56631] LOC201705 (Accession XP_117329.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC201705 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC201705, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC201705 BINDING SITE, designated SEQ ID:9125, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56632] Another function of GAM7957 is therefore inhibition of LOC201705 (Accession XP_117329.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC201705.

[56633] LOC201868 (Accession XP_114393.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC201868 BINDING SITE1 and LOC201868 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC201868, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC201868 BINDING SITE1 and LOC201868 BINDING SITE2, designated SEQ ID:19499 and SEQ ID:17081 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56634] Another function of GAM7957 is therefore inhibition of LOC201868 (Accession XP_114393.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC201868.

[56635] LOC201895 (Accession NP_777581.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC201895 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC201895, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC201895 BINDING SITE, designated SEQ ID:2773, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56636] Another function of GAM7957 is therefore inhibition of LOC201895 (Accession NP_777581.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC201895.

[56637] LOC201911 (Accession XP_117339.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC201911 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC201911, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC201911 BINDING SITE, designated SEQ ID:2545, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56638] Another function of GAM7957 is therefore inhibition of

LOC201911 (Accession XP_117339.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC201911.

[56639] LOC202134 (Accession XP_117365.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC202134 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC202134, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC202134 BINDING SITE, designated SEQ ID:15085, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56640] Another function of GAM7957 is therefore inhibition of LOC202134 (Accession XP_117365.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC202134.

[56641] LOC202460 (Accession XP_114493.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC202460 BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by LOC202460, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC202460 BINDING SITE, designated SEQ ID:5365, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56642] Another function of GAM7957 is therefore inhibition of LOC202460 (Accession XP_114493.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC202460.

[56643] LOC202781 (Accession XP_117455.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC202781 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC202781, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC202781 BINDING SITE, designated SEQ ID:17055, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also design-

nated SEQ ID:297.

[56644] Another function of GAM7957 is therefore inhibition of LOC202781 (Accession XP_117455.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC202781.

[56645] LOC202868 (Accession XP_117477.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC202868 BINDING SITE1 through LOC202868 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC202868, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC202868 BINDING SITE1 through LOC202868 BINDING SITE3, designated SEQ ID:614, SEQ ID:15108 and SEQ ID:2487 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56646] Another function of GAM7957 is therefore inhibition of LOC202868 (Accession XP_117477.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC202868.

[56647] LOC202934 (Accession XP_117486.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC202934 BINDING SITE1 and LOC202934 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC202934, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC202934 BINDING SITE1 and LOC202934 BINDING SITE2, designated SEQ ID:13454 and SEQ ID:2071 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56648] Another function of GAM7957 is therefore inhibition of LOC202934 (Accession XP_117486.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC202934.

[56649] LOC203245 (Accession XP_114657.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC203245 BINDING SITE1 and LOC203245 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC203245, corresponding to target binding sites such as BINDING SITE I, BINDING SITE

II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC203245 BINDING SITE1 and LOC203245 BINDING SITE2, designated SEQ ID:3440 and SEQ ID:2549 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56650] Another function of GAM7957 is therefore inhibition of LOC203245 (Accession XP_114657.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC203245.

[56651] LOC204288 (Accession XP_115295.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC204288 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC204288, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC204288 BINDING SITE, designated SEQ ID:11765, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56652] Another function of GAM7957 is therefore inhibition of

LOC204288 (Accession XP_115295.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC204288.

[56653] LOC205272 (Accession XP_115760.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC205272 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC205272, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC205272 BINDING SITE, designated SEQ ID:12156, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56654] Another function of GAM7957 is therefore inhibition of LOC205272 (Accession XP_115760.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC205272.

[56655] LOC206412 (Accession XP_116497.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC206412 BINDING SITE1 and LOC206412 BINDING

SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC206412, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC206412 BINDING SITE1 and LOC206412 BINDING SITE2, designated SEQ ID:1492 and SEQ ID:4032 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56656] Another function of GAM7957 is therefore inhibition of LOC206412 (Accession XP_116497.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC206412.

[56657] LOC219293 (Accession XP_166599.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC219293 BINDING SITE1 through LOC219293 BINDING SITE4 are target binding sites found in untranslated regions of mRNA encoded by LOC219293, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC219293 BINDING SITE1 through LOC219293 BINDING SITE4, des-

ignated SEQ ID:17505, SEQ ID:13988, SEQ ID:9335 and SEQ ID:3056 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56658] Another function of GAM7957 is therefore inhibition of LOC219293 (Accession XP_166599.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC219293.

[56659] LOC219347 (Accession XP_167564.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC219347 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC219347, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC219347 BINDING SITE, designated SEQ ID:614, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56660] Another function of GAM7957 is therefore inhibition of LOC219347 (Accession XP_167564.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC219347.

[56661] LOC219649 (Accession XP_167562.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC219649 BINDING SITE1 through LOC219649 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC219649, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC219649 BINDING SITE1 through LOC219649 BINDING SITE3, designated SEQ ID:4880, SEQ ID:19057 and SEQ ID:6149 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56662] Another function of GAM7957 is therefore inhibition of LOC219649 (Accession XP_167562.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC219649.

[56663] LOC219690 (Accession XP_167572.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC219690 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by

LOC219690, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC219690 BINDING SITE, designated SEQ ID:5800, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56664] Another function of GAM7957 is therefore inhibition of LOC219690 (Accession XP_167572.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC219690.

[56665] LOC219722 (Accession XP_167593.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC219722 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC219722, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC219722 BINDING SITE, designated SEQ ID:4908, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56666] Another function of GAM7957 is therefore inhibition of LOC219722 (Accession XP_167593.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC219722.

[56667] LOC219908 (Accession XP_169057.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC219908 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC219908, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC219908 BINDING SITE, designated SEQ ID:15762, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56668] Another function of GAM7957 is therefore inhibition of LOC219908 (Accession XP_169057.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC219908.

[56669] LOC219919 (Accession XP_167785.1) is another GAM7957 target gene, herein designated TARGET GENE.

LOC219919 BINDING SITE1 and LOC219919 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC219919, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC219919 BINDING SITE1 and LOC219919 BINDING SITE2, designated SEQ ID:19952 and SEQ ID:1492 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56670] Another function of GAM7957 is therefore inhibition of LOC219919 (Accession XP_167785.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC219919.

[56671] LOC220070 (Accession NP_660351.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC220070 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC220070, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC220070 BINDING SITE, design-

nated SEQ ID:645, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56672] Another function of GAM7957 is therefore inhibition of LOC220070 (Accession NP_660351.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC220070.

[56673] LOC220906 (Accession XP_166133.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC220906 BINDING SITE1 and LOC220906 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC220906, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC220906 BINDING SITE1 and LOC220906 BINDING SITE2, designated SEQ ID:12432 and SEQ ID:5882 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56674] Another function of GAM7957 is therefore inhibition of LOC220906 (Accession XP_166133.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC220906.

[56675] LOC221042 (Accession XP_167669.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC221042 BINDING SITE1 and LOC221042 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC221042, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC221042 BINDING SITE1 and LOC221042 BINDING SITE2, designated SEQ ID:5830 and SEQ ID:10438 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56676] Another function of GAM7957 is therefore inhibition of LOC221042 (Accession XP_167669.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC221042.

[56677] LOC221091 (Accession XP_169026.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC221091 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by

LOC221091, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC221091 BINDING SITE, designated SEQ ID:11627, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56678] Another function of GAM7957 is therefore inhibition of LOC221091 (Accession XP_169026.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC221091.

[56679] LOC221288 (Accession XP_168058.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC221288 BINDING SITE1 and LOC221288 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC221288, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC221288 BINDING SITE1 and LOC221288 BINDING SITE2, designated SEQ ID:17328 and SEQ ID:11276 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated

GAM RNA, also designated SEQ ID:297.

[56680] Another function of GAM7957 is therefore inhibition of LOC221288 (Accession XP_168058.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC221288.

[56681] LOC221543 (Accession XP_168091.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC221543 BINDING SITE1 and LOC221543 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC221543, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC221543 BINDING SITE1 and LOC221543 BINDING SITE2, designated SEQ ID:5859 and SEQ ID:17535 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56682] Another function of GAM7957 is therefore inhibition of LOC221543 (Accession XP_168091.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC221543.

[56683] LOC221550 (Accession XP_166388.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC221550 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC221550, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC221550 BINDING SITE, designated SEQ ID:16121, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56684] Another function of GAM7957 is therefore inhibition of LOC221550 (Accession XP_166388.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC221550.

[56685] LOC221889 (Accession XP_166513.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC221889 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC221889, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC221889 BINDING SITE, designated SEQ ID:8562, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56686] Another function of GAM7957 is therefore inhibition of LOC221889 (Accession XP_166513.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC221889.

[56687] LOC221943 (Accession XP_168343.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC221943 BINDING SITE1 and LOC221943 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC221943, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC221943 BINDING SITE1 and LOC221943 BINDING SITE2, designated SEQ ID:3974 and SEQ ID:4428 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56688] Another function of GAM7957 is therefore inhibition of LOC221943 (Accession XP_168343.1) . Accordingly, utili-

ties of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC221943.

[56689] LOC221954 (Accession XP_168349.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC221954 BINDING SITE1 and LOC221954 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC221954, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC221954 BINDING SITE1 and LOC221954 BINDING SITE2, designated SEQ ID:5782 and SEQ ID:19058 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56690] Another function of GAM7957 is therefore inhibition of LOC221954 (Accession XP_168349.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC221954.

[56691] LOC221962 (Accession XP_166554.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC221962 BINDING SITE1 and LOC221962 BINDING

SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC221962, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC221962 BINDING SITE1 and LOC221962 BINDING SITE2, designated SEQ ID:14360 and SEQ ID:15781 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56692] Another function of GAM7957 is therefore inhibition of LOC221962 (Accession XP_166554.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC221962.

[56693] LOC222031 (Accession XP_168371.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC222031 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC222031, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC222031 BINDING SITE, designated SEQ ID:10696, to the nucleotide sequence of

GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56694] Another function of GAM7957 is therefore inhibition of LOC222031 (Accession XP_168371.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC222031.

[56695] LOC222060 (Accession XP_168427.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC222060 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC222060, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC222060 BINDING SITE, designated SEQ ID:18690, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56696] Another function of GAM7957 is therefore inhibition of LOC222060 (Accession XP_168427.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC222060.

[56697] LOC222160 (Accession XP_168431.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC222160 BINDING SITE1 through LOC222160 BINDING SITE4 are target binding sites found in untranslated regions of mRNA encoded by LOC222160, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC222160 BINDING SITE1 through LOC222160 BINDING SITE4, designated SEQ ID:9832, SEQ ID:10916, SEQ ID:2116 and SEQ ID:15984 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56698] Another function of GAM7957 is therefore inhibition of LOC222160 (Accession XP_168431.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC222160.

[56699] LOC222225 (Accession XP_168633.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC222225 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC222225, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC222225 BINDING SITE, designated SEQ ID:18049, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56700] Another function of GAM7957 is therefore inhibition of LOC222225 (Accession XP_168633.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC222225.

[56701] LOC222662 (Accession XP_167086.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC222662 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC222662, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC222662 BINDING SITE, designated SEQ ID:10395, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56702] Another function of GAM7957 is therefore inhibition of

LOC222662 (Accession XP_167086.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC222662.

[56703] LOC222674 (Accession XP_167095.3) is another GAM7957 target gene, herein designated TARGET GENE. LOC222674 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC222674, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC222674 BINDING SITE, designated SEQ ID:10435, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56704] Another function of GAM7957 is therefore inhibition of LOC222674 (Accession XP_167095.3) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC222674.

[56705] LOC253216 (Accession XP_170765.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC253216 BINDING SITE is a target binding site found in

the 5' untranslated region of mRNA encoded by LOC253216, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC253216 BINDING SITE, designated SEQ ID:6471, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56706] Another function of GAM7957 is therefore inhibition of LOC253216 (Accession XP_170765.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC253216.

[56707] LOC253612 (Accession XP_172985.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC253612 BINDING SITE1 and LOC253612 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC253612, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC253612 BINDING SITE1 and LOC253612 BINDING SITE2, designated SEQ ID:10438 and SEQ ID:5924 respectively, to the

nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56708] Another function of GAM7957 is therefore inhibition of LOC253612 (Accession XP_172985.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC253612.

[56709] LOC254100 (Accession XP_172851.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC254100 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC254100, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC254100 BINDING SITE, designated SEQ ID:14304, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56710] Another function of GAM7957 is therefore inhibition of LOC254100 (Accession XP_172851.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC254100.

[56711] LOC254266 (Accession XP_173221.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC254266 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC254266, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC254266 BINDING SITE, designated SEQ ID:9572, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56712] Another function of GAM7957 is therefore inhibition of LOC254266 (Accession XP_173221.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC254266.

[56713] LOC254808 (Accession XP_173100.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC254808 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC254808, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC254808 BINDING SITE, designated SEQ ID:15343, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56714] Another function of GAM7957 is therefore inhibition of LOC254808 (Accession XP_173100.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC254808.

[56715] LOC254875 (Accession XP_171170.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC254875 BINDING SITE1 and LOC254875 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC254875, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC254875 BINDING SITE1 and LOC254875 BINDING SITE2, designated SEQ ID:2306 and SEQ ID:7908 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56716] Another function of GAM7957 is therefore inhibition of LOC254875 (Accession XP_171170.1) . Accordingly, utili-

ties of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC254875.

[56717] LOC254946 (Accession XP_171161.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC254946 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC254946, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC254946 BINDING SITE, designated SEQ ID:9560, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56718] Another function of GAM7957 is therefore inhibition of LOC254946 (Accession XP_171161.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC254946.

[56719] LOC255031 (Accession XP_173187.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC255031 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by

LOC255031, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC255031 BINDING SITE, designated SEQ ID:8789, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56720] Another function of GAM7957 is therefore inhibition of LOC255031 (Accession XP_173187.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC255031.

[56721] LOC255177 (Accession XP_172941.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC255177 BINDING SITE1 and LOC255177 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC255177, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC255177 BINDING SITE1 and LOC255177 BINDING SITE2, designated SEQ ID:6524 and SEQ ID:1492 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated

GAM RNA, also designated SEQ ID:297.

[56722] Another function of GAM7957 is therefore inhibition of LOC255177 (Accession XP_172941.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC255177.

[56723] LOC255328 (Accession XP_172920.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC255328 BINDING SITE1 and LOC255328 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC255328, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC255328 BINDING SITE1 and LOC255328 BINDING SITE2, designated SEQ ID:11775 and SEQ ID:1492 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56724] Another function of GAM7957 is therefore inhibition of LOC255328 (Accession XP_172920.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC255328.

[56725] LOC255374 (Accession XP_171171.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC255374 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC255374, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC255374 BINDING SITE, designated SEQ ID:6760, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56726] Another function of GAM7957 is therefore inhibition of LOC255374 (Accession XP_171171.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC255374.

[56727] LOC255971 (Accession XP_172907.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC255971 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC255971, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC255971 BINDING SITE, designated SEQ ID:5830, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56728] Another function of GAM7957 is therefore inhibition of LOC255971 (Accession XP_172907.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC255971.

[56729] LOC256019 (Accession XP_171084.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC256019 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC256019, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC256019 BINDING SITE, designated SEQ ID:12654, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56730] Another function of GAM7957 is therefore inhibition of LOC256019 (Accession XP_171084.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC256019.

[56731] LOC256106 (Accession XP_172187.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC256106 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC256106, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC256106 BINDING SITE, designated SEQ ID:18825, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56732] Another function of GAM7957 is therefore inhibition of LOC256106 (Accession XP_172187.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC256106.

[56733] LOC256470 (Accession XP_171439.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC256470 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC256470, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC256470 BINDING SITE, designated SEQ ID:10018, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56734] Another function of GAM7957 is therefore inhibition of LOC256470 (Accession XP_171439.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC256470.

[56735] LOC256515 (Accession XP_172866.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC256515 BINDING SITE1 and LOC256515 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC256515, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC256515 BINDING SITE1 and LOC256515 BINDING SITE2, designated SEQ ID:7125 and SEQ ID:1492 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56736] Another function of GAM7957 is therefore inhibition of LOC256515 (Accession XP_172866.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC256515.

[56737] LOC256594 (Accession XP_173127.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC256594 BINDING SITE1 and LOC256594 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC256594, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC256594 BINDING SITE1 and LOC256594 BINDING SITE2, designated SEQ ID:1492 and SEQ ID:2732 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56738] Another function of GAM7957 is therefore inhibition of LOC256594 (Accession XP_173127.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC256594.

[56739] LOC282910 (Accession XP_212580.1) is another

GAM7957 target gene, herein designated TARGET GENE. LOC282910 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC282910, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC282910 BINDING SITE, designated SEQ ID:16121, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56740] Another function of GAM7957 is therefore inhibition of LOC282910 (Accession XP_212580.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC282910.

[56741] LOC282915 (Accession XP_212579.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC282915 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC282915, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC282915 BINDING SITE, design-

nated SEQ ID:5928, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56742] Another function of GAM7957 is therefore inhibition of LOC282915 (Accession XP_212579.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC282915.

[56743] LOC282947 (Accession XP_212628.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC282947 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC282947, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC282947 BINDING SITE, designated SEQ ID:16121, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56744] Another function of GAM7957 is therefore inhibition of LOC282947 (Accession XP_212628.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC282947.

[56745] LOC282951 (Accession XP_212627.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC282951 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC282951, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC282951 BINDING SITE, designated SEQ ID:5928, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56746] Another function of GAM7957 is therefore inhibition of LOC282951 (Accession XP_212627.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC282951.

[56747] LOC282959 (Accession XP_212622.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC282959 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC282959, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC282959 BINDING SITE, designated SEQ ID:10435, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56748] Another function of GAM7957 is therefore inhibition of LOC282959 (Accession XP_212622.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC282959.

[56749] LOC282963 (Accession XP_210834.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC282963 BINDING SITE1 and LOC282963 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC282963, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC282963 BINDING SITE1 and LOC282963 BINDING SITE2, designated SEQ ID:15343 and SEQ ID:15108 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56750] Another function of GAM7957 is therefore inhibition of

LOC282963 (Accession XP_210834.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC282963.

[56751] LOC282987 (Accession XP_210845.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC282987 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC282987, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC282987 BINDING SITE, designated SEQ ID:18905, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56752] Another function of GAM7957 is therefore inhibition of LOC282987 (Accession XP_210845.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC282987.

[56753] LOC283005 (Accession XP_208481.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283005 BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by LOC283005, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283005 BINDING SITE, designated SEQ ID:9858, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56754] Another function of GAM7957 is therefore inhibition of LOC283005 (Accession XP_208481.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283005.

[56755] LOC283050 (Accession XP_210872.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283050 BINDING SITE1 and LOC283050 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC283050, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283050 BINDING SITE1 and LOC283050 BINDING SITE2, designated SEQ ID:4180 and SEQ ID:1557 respectively, to the

nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56756] Another function of GAM7957 is therefore inhibition of LOC283050 (Accession XP_210872.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283050.

[56757] LOC283061 (Accession XP_210875.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283061 BINDING SITE1 and LOC283061 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC283061, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283061 BINDING SITE1 and LOC283061 BINDING SITE2, designated SEQ ID:18041 and SEQ ID:19246 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56758] Another function of GAM7957 is therefore inhibition of LOC283061 (Accession XP_210875.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC283061.

[56759] LOC283083 (Accession XP_210883.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283083 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283083, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283083 BINDING SITE, designated SEQ ID:8877, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56760] Another function of GAM7957 is therefore inhibition of LOC283083 (Accession XP_210883.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283083.

[56761] LOC283107 (Accession XP_210889.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283107 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283107, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283107 BINDING SITE, designated SEQ ID:16476, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56762] Another function of GAM7957 is therefore inhibition of LOC283107 (Accession XP_210889.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283107.

[56763] LOC283125 (Accession XP_210897.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283125 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283125, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283125 BINDING SITE, designated SEQ ID:13229, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56764] Another function of GAM7957 is therefore inhibition of LOC283125 (Accession XP_210897.1) . Accordingly, utili-

ties of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283125.

[56765] LOC283143 (Accession XP_210920.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283143 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283143, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283143 BINDING SITE, designated SEQ ID:16945, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56766] Another function of GAM7957 is therefore inhibition of LOC283143 (Accession XP_210920.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283143.

[56767] LOC283168 (Accession XP_210910.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283168 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by

LOC283168, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283168 BINDING SITE, designated SEQ ID:19057, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56768] Another function of GAM7957 is therefore inhibition of LOC283168 (Accession XP_210910.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283168.

[56769] LOC283177 (Accession XP_210903.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283177 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283177, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283177 BINDING SITE, designated SEQ ID:12613, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56770] Another function of GAM7957 is therefore inhibition of LOC283177 (Accession XP_210903.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283177.

[56771] LOC283208 (Accession XP_208559.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC283208 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283208, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283208 BINDING SITE, designated SEQ ID:9151, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56772] Another function of GAM7957 is therefore inhibition of LOC283208 (Accession XP_208559.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283208.

[56773] LOC283215 (Accession XP_208555.2) is another GAM7957 target gene, herein designated TARGET GENE.

LOC283215 BINDING SITE1 and LOC283215 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC283215, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283215 BINDING SITE1 and LOC283215 BINDING SITE2, designated SEQ ID:8878 and SEQ ID:9770 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56774] Another function of GAM7957 is therefore inhibition of LOC283215 (Accession XP_208555.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283215.

[56775] LOC283235 (Accession XP_208578.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283235 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283235, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283235 BINDING SITE, design-

nated SEQ ID:18691, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56776] Another function of GAM7957 is therefore inhibition of LOC283235 (Accession XP_208578.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283235.

[56777] LOC283243 (Accession XP_210947.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC283243 BINDING SITE1 and LOC283243 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC283243, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283243 BINDING SITE1 and LOC283243 BINDING SITE2, designated SEQ ID:11352 and SEQ ID:14360 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56778] Another function of GAM7957 is therefore inhibition of LOC283243 (Accession XP_210947.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC283243.

[56779] LOC283244 (Accession XP_208583.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC283244 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283244, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283244 BINDING SITE, designated SEQ ID:18377, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56780] Another function of GAM7957 is therefore inhibition of LOC283244 (Accession XP_208583.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283244.

[56781] LOC283269 (Accession XP_210953.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283269 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283269, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283269 BINDING SITE, designated SEQ ID:1906, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56782] Another function of GAM7957 is therefore inhibition of LOC283269 (Accession XP_210953.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283269.

[56783] LOC283283 (Accession XP_208601.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283283 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283283, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283283 BINDING SITE, designated SEQ ID:19053, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56784] Another function of GAM7957 is therefore inhibition of

LOC283283 (Accession XP_208601.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283283.

[56785] LOC283295 (Accession XP_210964.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283295 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283295, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283295 BINDING SITE, designated SEQ ID:12929, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56786] Another function of GAM7957 is therefore inhibition of LOC283295 (Accession XP_210964.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283295.

[56787] LOC283299 (Accession XP_210965.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283299 BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by LOC283299, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283299 BINDING SITE, designated SEQ ID:12796, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56788] Another function of GAM7957 is therefore inhibition of LOC283299 (Accession XP_210965.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283299.

[56789] LOC283314 (Accession XP_210969.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283314 BINDING SITE1 and LOC283314 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC283314, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283314 BINDING SITE1 and LOC283314 BINDING SITE2, designated SEQ ID:14571 and SEQ ID:18826 respectively, to the

nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56790] Another function of GAM7957 is therefore inhibition of LOC283314 (Accession XP_210969.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283314.

[56791] LOC283325 (Accession XP_208618.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283325 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283325, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283325 BINDING SITE, designated SEQ ID:15781, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56792] Another function of GAM7957 is therefore inhibition of LOC283325 (Accession XP_208618.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283325.

[56793] LOC283329 (Accession XP_210978.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283329 BINDING SITE1 and LOC283329 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC283329, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283329 BINDING SITE1 and LOC283329 BINDING SITE2, designated SEQ ID:18024 and SEQ ID:12188 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56794] Another function of GAM7957 is therefore inhibition of LOC283329 (Accession XP_210978.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283329.

[56795] LOC283357 (Accession XP_210991.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283357 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283357, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283357 BINDING SITE, designated SEQ ID:15018, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56796] Another function of GAM7957 is therefore inhibition of LOC283357 (Accession XP_210991.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283357.

[56797] LOC283382 (Accession XP_211005.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283382 BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by LOC283382, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283382 BINDING SITE, designated SEQ ID:9260, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56798] Another function of GAM7957 is therefore inhibition of LOC283382 (Accession XP_211005.1) . Accordingly, utili-

ties of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283382.

[56799] LOC283394 (Accession XP_211021.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283394 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283394, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283394 BINDING SITE, designated SEQ ID:17398, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56800] Another function of GAM7957 is therefore inhibition of LOC283394 (Accession XP_211021.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283394.

[56801] LOC283415 (Accession XP_208084.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283415 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by

LOC283415, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283415 BINDING SITE, designated SEQ ID:19054, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56802] Another function of GAM7957 is therefore inhibition of LOC283415 (Accession XP_208084.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283415.

[56803] LOC283437 (Accession XP_211038.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283437 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283437, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283437 BINDING SITE, designated SEQ ID:13667, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56804] Another function of GAM7957 is therefore inhibition of LOC283437 (Accession XP_211038.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283437.

[56805] LOC283438 (Accession XP_211042.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283438 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC283438, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283438 BINDING SITE, designated SEQ ID:15747, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56806] Another function of GAM7957 is therefore inhibition of LOC283438 (Accession XP_211042.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283438.

[56807] LOC283442 (Accession XP_211037.1) is another GAM7957 target gene, herein designated TARGET GENE.

LOC283442 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283442, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283442 BINDING SITE, designated SEQ ID:15984, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56808] Another function of GAM7957 is therefore inhibition of LOC283442 (Accession XP_211037.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283442.

[56809] LOC283453 (Accession XP_211047.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283453 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC283453, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283453 BINDING SITE, designated SEQ ID:19898, to the nucleotide sequence of

GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56810] Another function of GAM7957 is therefore inhibition of LOC283453 (Accession XP_211047.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283453.

[56811] LOC283460 (Accession XP_208682.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283460 BINDING SITE1 through LOC283460 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC283460, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283460 BINDING SITE1 through LOC283460 BINDING SITE3, designated SEQ ID:3523, SEQ ID:15308 and SEQ ID:1620 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56812] Another function of GAM7957 is therefore inhibition of LOC283460 (Accession XP_208682.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC283460.

[56813] LOC283467 (Accession XP_211050.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283467 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283467, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283467 BINDING SITE, designated SEQ ID:16897, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56814] Another function of GAM7957 is therefore inhibition of LOC283467 (Accession XP_211050.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283467.

[56815] LOC283506 (Accession XP_211073.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283506 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283506, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283506 BINDING SITE, designated SEQ ID:15343, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56816] Another function of GAM7957 is therefore inhibition of LOC283506 (Accession XP_211073.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283506.

[56817] LOC283508 (Accession XP_211070.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283508 BINDING SITE1 and LOC283508 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC283508, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283508 BINDING SITE1 and LOC283508 BINDING SITE2, designated SEQ ID:15089 and SEQ ID:14789 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56818] Another function of GAM7957 is therefore inhibition of

LOC283508 (Accession XP_211070.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283508.

[56819] LOC283531 (Accession XP_211078.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283531 BINDING SITE1 and LOC283531 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC283531, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283531 BINDING SITE1 and LOC283531 BINDING SITE2, designated SEQ ID:5830 and SEQ ID:14787 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56820] Another function of GAM7957 is therefore inhibition of LOC283531 (Accession XP_211078.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283531.

[56821] LOC283566 (Accession XP_211114.1) is another GAM7957 target gene, herein designated TARGET GENE.

LOC283566 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283566, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283566 BINDING SITE, designated SEQ ID:9763, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56822] Another function of GAM7957 is therefore inhibition of LOC283566 (Accession XP_211114.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283566.

[56823] LOC283570 (Accession XP_211118.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283570 BINDING SITE1 and LOC283570 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC283570, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283570 BINDING SITE1 and LOC283570 BINDING SITE2, design-

nated SEQ ID:18691 and SEQ ID:3025 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56824] Another function of GAM7957 is therefore inhibition of LOC283570 (Accession XP_211118.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283570.

[56825] LOC283633 (Accession XP_208762.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283633 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC283633, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283633 BINDING SITE, designated SEQ ID:1548, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56826] Another function of GAM7957 is therefore inhibition of LOC283633 (Accession XP_208762.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC283633.

[56827] LOC283655 (Accession XP_211144.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283655 BINDING SITE1 through LOC283655 BINDING SITE4 are target binding sites found in untranslated regions of mRNA encoded by LOC283655, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283655 BINDING SITE1 through LOC283655 BINDING SITE4, designated SEQ ID:17452, SEQ ID:9536, SEQ ID:14905 and SEQ ID:13166 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56828] Another function of GAM7957 is therefore inhibition of LOC283655 (Accession XP_211144.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283655.

[56829] LOC283686 (Accession XP_211164.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283686 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by

LOC283686, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283686 BINDING SITE, designated SEQ ID:4155, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56830] Another function of GAM7957 is therefore inhibition of LOC283686 (Accession XP_211164.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283686.

[56831] LOC283690 (Accession XP_211167.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283690 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283690, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283690 BINDING SITE, designated SEQ ID:9781, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56832] Another function of GAM7957 is therefore inhibition of LOC283690 (Accession XP_211167.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283690.

[56833] LOC283693 (Accession XP_208788.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283693 BINDING SITE1 and LOC283693 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC283693, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283693 BINDING SITE1 and LOC283693 BINDING SITE2, designated SEQ ID:2070 and SEQ ID:5830 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56834] Another function of GAM7957 is therefore inhibition of LOC283693 (Accession XP_208788.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283693.

[56835] LOC283697 (Accession XP_211173.1) is another

GAM7957 target gene, herein designated TARGET GENE. LOC283697 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC283697, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283697 BINDING SITE, designated SEQ ID:18836, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56836] Another function of GAM7957 is therefore inhibition of LOC283697 (Accession XP_211173.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283697.

[56837] LOC283706 (Accession XP_208804.3) is another GAM7957 target gene, herein designated TARGET GENE. LOC283706 BINDING SITE1 and LOC283706 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC283706, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283706

BINDING SITE1 and LOC283706 BINDING SITE2, designated SEQ ID:2678 and SEQ ID:15592 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56838] Another function of GAM7957 is therefore inhibition of LOC283706 (Accession XP_208804.3) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283706.

[56839] LOC283731 (Accession XP_211184.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283731 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283731, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283731 BINDING SITE, designated SEQ ID:8067, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56840] Another function of GAM7957 is therefore inhibition of LOC283731 (Accession XP_211184.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC283731.

[56841] LOC283740 (Accession XP_208819.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283740 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283740, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283740 BINDING SITE, designated SEQ ID:13155, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56842] Another function of GAM7957 is therefore inhibition of LOC283740 (Accession XP_208819.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283740.

[56843] LOC283760 (Accession XP_208826.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC283760 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283760, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283760 BINDING SITE, designated SEQ ID:14124, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56844] Another function of GAM7957 is therefore inhibition of LOC283760 (Accession XP_208826.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283760.

[56845] LOC283767 (Accession XP_208835.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283767 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC283767, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283767 BINDING SITE, designated SEQ ID:10439, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56846] Another function of GAM7957 is therefore inhibition of

LOC283767 (Accession XP_208835.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283767.

[56847] LOC283778 (Accession XP_211199.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283778 BINDING SITE1 and LOC283778 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC283778, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283778 BINDING SITE1 and LOC283778 BINDING SITE2, designated SEQ ID:14438 and SEQ ID:15089 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56848] Another function of GAM7957 is therefore inhibition of LOC283778 (Accession XP_211199.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283778.

[56849] LOC283851 (Accession XP_211229.1) is another GAM7957 target gene, herein designated TARGET GENE.

LOC283851 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283851, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283851 BINDING SITE, designated SEQ ID:16120, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56850] Another function of GAM7957 is therefore inhibition of LOC283851 (Accession XP_211229.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283851.

[56851] LOC283863 (Accession XP_208875.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283863 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283863, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283863 BINDING SITE, designated SEQ ID:20057, to the nucleotide sequence of

GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56852] Another function of GAM7957 is therefore inhibition of LOC283863 (Accession XP_208875.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283863.

[56853] LOC283875 (Accession XP_211241.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283875 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283875, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283875 BINDING SITE, designated SEQ ID:8987, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56854] Another function of GAM7957 is therefore inhibition of LOC283875 (Accession XP_211241.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283875.

[56855] LOC283889 (Accession XP_208899.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283889 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283889, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283889 BINDING SITE, designated SEQ ID:2881, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56856] Another function of GAM7957 is therefore inhibition of LOC283889 (Accession XP_208899.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283889.

[56857] LOC283894 (Accession XP_211250.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283894 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283894, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC283894 BINDING SITE, designated SEQ ID:9765, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56858] Another function of GAM7957 is therefore inhibition of LOC283894 (Accession XP_211250.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283894.

[56859] LOC283909 (Accession XP_211256.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283909 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283909, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283909 BINDING SITE, designated SEQ ID:9765, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56860] Another function of GAM7957 is therefore inhibition of LOC283909 (Accession XP_211256.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC283909.

[56861] LOC283924 (Accession XP_208906.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283924 BINDING SITE1 and LOC283924 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC283924, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283924 BINDING SITE1 and LOC283924 BINDING SITE2, designated SEQ ID:4977 and SEQ ID:18690 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56862] Another function of GAM7957 is therefore inhibition of LOC283924 (Accession XP_208906.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283924.

[56863] LOC283928 (Accession XP_208909.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283928 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by

LOC283928, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283928 BINDING SITE, designated SEQ ID:962, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56864] Another function of GAM7957 is therefore inhibition of LOC283928 (Accession XP_208909.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283928.

[56865] LOC283929 (Accession XP_208905.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC283929 BINDING SITE1 through LOC283929 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC283929, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283929 BINDING SITE1 through LOC283929 BINDING SITE3, designated SEQ ID:1734, SEQ ID:7877 and SEQ ID:9417 respectively, to the nucleotide sequence of GAM7957 RNA,

herein designated GAM RNA, also designated SEQ ID:297.

[56866] Another function of GAM7957 is therefore inhibition of LOC283929 (Accession XP_208905.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283929.

[56867] LOC283932 (Accession NP_787097.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283932 BINDING SITE1 and LOC283932 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC283932, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283932 BINDING SITE1 and LOC283932 BINDING SITE2, designated SEQ ID:8956 and SEQ ID:6418 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56868] Another function of GAM7957 is therefore inhibition of LOC283932 (Accession NP_787097.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283932.

[56869] LOC283949 (Accession XP_208928.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283949 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283949, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283949 BINDING SITE, designated SEQ ID:12303, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56870] Another function of GAM7957 is therefore inhibition of LOC283949 (Accession XP_208928.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283949.

[56871] LOC283954 (Accession XP_208931.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283954 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283954, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC283954 BINDING SITE, designated SEQ ID:18689, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56872] Another function of GAM7957 is therefore inhibition of LOC283954 (Accession XP_208931.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283954.

[56873] LOC283972 (Accession XP_211282.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283972 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283972, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283972 BINDING SITE, designated SEQ ID:471, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56874] Another function of GAM7957 is therefore inhibition of LOC283972 (Accession XP_211282.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC283972.

[56875] LOC283981 (Accession XP_208941.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283981 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283981, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283981 BINDING SITE, designated SEQ ID:9983, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56876] Another function of GAM7957 is therefore inhibition of LOC283981 (Accession XP_208941.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283981.

[56877] LOC283985 (Accession XP_208951.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC283985 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by LOC283985, corresponding to a target

binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283985 BINDING SITE, designated SEQ ID:15983, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56878] Another function of GAM7957 is therefore inhibition of LOC283985 (Accession XP_208951.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283985.

[56879] LOC283985 (Accession NP_835229.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283985 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by LOC283985, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283985 BINDING SITE, designated SEQ ID:15983, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56880] Another function of GAM7957 is therefore inhibition of

LOC283985 (Accession NP_835229.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283985.

[56881] LOC283995 (Accession XP_208945.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC283995 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283995, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283995 BINDING SITE, designated SEQ ID:11864, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56882] Another function of GAM7957 is therefore inhibition of LOC283995 (Accession XP_208945.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283995.

[56883] LOC284001 (Accession XP_208958.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC284001 BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by LOC284001, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284001 BINDING SITE, designated SEQ ID:17795, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56884] Another function of GAM7957 is therefore inhibition of LOC284001 (Accession XP_208958.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284001.

[56885] LOC284009 (Accession XP_211299.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284009 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC284009, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284009 BINDING SITE, designated SEQ ID:12796, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also design-

nated SEQ ID:297.

[56886] Another function of GAM7957 is therefore inhibition of LOC284009 (Accession XP_211299.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284009.

[56887] LOC284014 (Accession XP_211300.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC284014 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284014, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284014 BINDING SITE, designated SEQ ID:5830, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56888] Another function of GAM7957 is therefore inhibition of LOC284014 (Accession XP_211300.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284014.

[56889] LOC284024 (Accession XP_208970.1) is another

GAM7957 target gene, herein designated TARGET GENE. LOC284024 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284024, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284024 BINDING SITE, designated SEQ ID:9417, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56890] Another function of GAM7957 is therefore inhibition of LOC284024 (Accession XP_208970.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284024.

[56891] LOC284031 (Accession XP_208982.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284031 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284031, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284031 BINDING SITE, design-

nated SEQ ID:9422, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56892] Another function of GAM7957 is therefore inhibition of LOC284031 (Accession XP_208982.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284031.

[56893] LOC284044 (Accession XP_211310.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284044 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284044, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284044 BINDING SITE, designated SEQ ID:723, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56894] Another function of GAM7957 is therefore inhibition of LOC284044 (Accession XP_211310.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC284044.

[56895] LOC284048 (Accession XP_208152.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284048 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284048, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284048 BINDING SITE, designated SEQ ID:12193, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56896] Another function of GAM7957 is therefore inhibition of LOC284048 (Accession XP_208152.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284048.

[56897] LOC284062 (Accession XP_211316.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284062 BINDING SITE1 through LOC284062 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC284062, corresponding to target binding sites such as BINDING SITE I, BINDING SITE

II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284062 BINDING SITE1 through LOC284062 BINDING SITE3, designated SEQ ID:6320, SEQ ID:2483 and SEQ ID:8856 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56898] Another function of GAM7957 is therefore inhibition of LOC284062 (Accession XP_211316.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284062.

[56899] LOC284072 (Accession XP_211319.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284072 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284072, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284072 BINDING SITE, designated SEQ ID:947, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56900] Another function of GAM7957 is therefore inhibition of

LOC284072 (Accession XP_211319.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284072.

[56901] LOC284074 (Accession XP_211321.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284074 BINDING SITE1 through LOC284074 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC284074, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284074 BINDING SITE1 through LOC284074 BINDING SITE3, designated SEQ ID:3337, SEQ ID:11071 and SEQ ID:1199 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56902] Another function of GAM7957 is therefore inhibition of LOC284074 (Accession XP_211321.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284074.

[56903] LOC284101 (Accession XP_209019.1) is another GAM7957 target gene, herein designated TARGET GENE.

LOC284101 BINDING SITE1 and LOC284101 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC284101, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284101 BINDING SITE1 and LOC284101 BINDING SITE2, designated SEQ ID:13155 and SEQ ID:8019 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56904] Another function of GAM7957 is therefore inhibition of LOC284101 (Accession XP_209019.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284101.

[56905] LOC284102 (Accession XP_211327.3) is another GAM7957 target gene, herein designated TARGET GENE. LOC284102 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC284102, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284102 BINDING SITE, design-

nated SEQ ID:10901, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56906] Another function of GAM7957 is therefore inhibition of LOC284102 (Accession XP_211327.3) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284102.

[56907] LOC284121 (Accession XP_209026.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284121 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284121, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284121 BINDING SITE, designated SEQ ID:4377, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56908] Another function of GAM7957 is therefore inhibition of LOC284121 (Accession XP_209026.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC284121.

[56909] LOC284145 (Accession XP_211353.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284145 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284145, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284145 BINDING SITE, designated SEQ ID:5042, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56910] Another function of GAM7957 is therefore inhibition of LOC284145 (Accession XP_211353.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284145.

[56911] LOC284155 (Accession XP_211354.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284155 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC284155, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284155 BINDING SITE, designated SEQ ID:12886, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56912] Another function of GAM7957 is therefore inhibition of LOC284155 (Accession XP_211354.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284155.

[56913] LOC284158 (Accession XP_209041.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284158 BINDING SITE1 and LOC284158 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC284158, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284158 BINDING SITE1 and LOC284158 BINDING SITE2, designated SEQ ID:1163 and SEQ ID:3397 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56914] Another function of GAM7957 is therefore inhibition of

LOC284158 (Accession XP_209041.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284158.

[56915] LOC284161 (Accession XP_209047.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC284161 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284161, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284161 BINDING SITE, designated SEQ ID:19278, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56916] Another function of GAM7957 is therefore inhibition of LOC284161 (Accession XP_209047.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284161.

[56917] LOC284170 (Accession XP_211357.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284170 BINDING SITE is a target binding site found in

the 5' untranslated region of mRNA encoded by LOC284170, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284170 BINDING SITE, designated SEQ ID:18300, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56918] Another function of GAM7957 is therefore inhibition of LOC284170 (Accession XP_211357.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284170.

[56919] LOC284174 (Accession XP_211363.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284174 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC284174, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284174 BINDING SITE, designated SEQ ID:6740, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also design-

nated SEQ ID:297.

[56920] Another function of GAM7957 is therefore inhibition of LOC284174 (Accession XP_211363.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284174.

[56921] LOC284179 (Accession XP_211369.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284179 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284179, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284179 BINDING SITE, designated SEQ ID:11754, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56922] Another function of GAM7957 is therefore inhibition of LOC284179 (Accession XP_211369.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284179.

[56923] LOC284181 (Accession XP_209061.1) is another

GAM7957 target gene, herein designated TARGET GENE. LOC284181 BINDING SITE1 and LOC284181 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC284181, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284181 BINDING SITE1 and LOC284181 BINDING SITE2, designated SEQ ID:14790 and SEQ ID:7321 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56924] Another function of GAM7957 is therefore inhibition of LOC284181 (Accession XP_209061.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284181.

[56925] LOC284183 (Accession XP_209059.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284183 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284183, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC284183 BINDING SITE, designated SEQ ID:19195, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56926] Another function of GAM7957 is therefore inhibition of LOC284183 (Accession XP_209059.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284183.

[56927] LOC284187 (Accession XP_211366.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC284187 BINDING SITE1 through LOC284187 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC284187, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284187 BINDING SITE1 through LOC284187 BINDING SITE3, designated SEQ ID:5070, SEQ ID:19057 and SEQ ID:12259 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56928] Another function of GAM7957 is therefore inhibition of LOC284187 (Accession XP_211366.2) . Accordingly, utili-

ties of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284187.

[56929] LOC284198 (Accession XP_211380.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284198 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC284198, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284198 BINDING SITE, designated SEQ ID:4105, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56930] Another function of GAM7957 is therefore inhibition of LOC284198 (Accession XP_211380.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284198.

[56931] LOC284211 (Accession XP_211386.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284211 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by

LOC284211, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284211 BINDING SITE, designated SEQ ID:16896, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56932] Another function of GAM7957 is therefore inhibition of LOC284211 (Accession XP_211386.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284211.

[56933] LOC284259 (Accession XP_211410.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284259 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284259, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284259 BINDING SITE, designated SEQ ID:11749, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56934] Another function of GAM7957 is therefore inhibition of LOC284259 (Accession XP_211410.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284259.

[56935] LOC284266 (Accession XP_211403.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284266 BINDING SITE1 and LOC284266 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC284266, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284266 BINDING SITE1 and LOC284266 BINDING SITE2, designated SEQ ID:17403 and SEQ ID:1030 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56936] Another function of GAM7957 is therefore inhibition of LOC284266 (Accession XP_211403.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284266.

[56937] LOC284267 (Accession XP_211411.1) is another

GAM7957 target gene, herein designated TARGET GENE. LOC284267 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284267, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284267 BINDING SITE, designated SEQ ID:19637, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56938] Another function of GAM7957 is therefore inhibition of LOC284267 (Accession XP_211411.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284267.

[56939] LOC284280 (Accession XP_211416.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284280 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC284280, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284280 BINDING SITE, design-

nated SEQ ID:7322, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56940] Another function of GAM7957 is therefore inhibition of LOC284280 (Accession XP_211416.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284280.

[56941] LOC284304 (Accession XP_211426.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284304 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284304, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284304 BINDING SITE, designated SEQ ID:13066, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56942] Another function of GAM7957 is therefore inhibition of LOC284304 (Accession XP_211426.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC284304.

[56943] LOC284311 (Accession XP_302720.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284311 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284311, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284311 BINDING SITE, designated SEQ ID:14092, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56944] Another function of GAM7957 is therefore inhibition of LOC284311 (Accession XP_302720.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284311.

[56945] LOC284313 (Accession XP_209116.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284313 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284313, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284313 BINDING SITE, designated SEQ ID:12307, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56946] Another function of GAM7957 is therefore inhibition of LOC284313 (Accession XP_209116.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284313.

[56947] LOC284318 (Accession XP_209149.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284318 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284318, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284318 BINDING SITE, designated SEQ ID:13433, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56948] Another function of GAM7957 is therefore inhibition of LOC284318 (Accession XP_209149.1) . Accordingly, utili-

ties of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284318.

[56949] LOC284347 (Accession XP_209120.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284347 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC284347, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284347 BINDING SITE, designated SEQ ID:698, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56950] Another function of GAM7957 is therefore inhibition of LOC284347 (Accession XP_209120.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284347.

[56951] LOC284371 (Accession XP_209155.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284371 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by

LOC284371, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284371 BINDING SITE, designated SEQ ID:15609, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56952] Another function of GAM7957 is therefore inhibition of LOC284371 (Accession XP_209155.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284371.

[56953] LOC284376 (Accession XP_209157.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284376 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284376, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284376 BINDING SITE, designated SEQ ID:7223, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56954] Another function of GAM7957 is therefore inhibition of LOC284376 (Accession XP_209157.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284376.

[56955] LOC284407 (Accession XP_209185.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284407 BINDING SITE1 through LOC284407 BINDING SITE4 are target binding sites found in untranslated regions of mRNA encoded by LOC284407, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284407 BINDING SITE1 through LOC284407 BINDING SITE4, designated SEQ ID:9857, SEQ ID:5830, SEQ ID:9066 and SEQ ID:5831 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56956] Another function of GAM7957 is therefore inhibition of LOC284407 (Accession XP_209185.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284407.

[56957] LOC284410 (Accession XP_211449.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284410 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284410, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284410 BINDING SITE, designated SEQ ID:9500, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56958] Another function of GAM7957 is therefore inhibition of LOC284410 (Accession XP_211449.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284410.

[56959] LOC284412 (Accession XP_209184.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284412 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC284412, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC284412 BINDING SITE, designated SEQ ID:9777, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56960] Another function of GAM7957 is therefore inhibition of LOC284412 (Accession XP_209184.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284412.

[56961] LOC284417 (Accession XP_209187.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284417 BINDING SITE1 and LOC284417 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC284417, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284417 BINDING SITE1 and LOC284417 BINDING SITE2, designated SEQ ID:3681 and SEQ ID:17423 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56962] Another function of GAM7957 is therefore inhibition of LOC284417 (Accession XP_209187.1) . Accordingly, utili-

ties of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284417.

[56963] LOC284419 (Accession XP_209193.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284419 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284419, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284419 BINDING SITE, designated SEQ ID:15017, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56964] Another function of GAM7957 is therefore inhibition of LOC284419 (Accession XP_209193.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284419.

[56965] LOC284434 (Accession XP_211460.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284434 BINDING SITE1 and LOC284434 BINDING SITE2 are target binding sites found in untranslated re-

gions of mRNA encoded by LOC284434, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284434 BINDING SITE1 and LOC284434 BINDING SITE2, designated SEQ ID:18690 and SEQ ID:9421 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56966] Another function of GAM7957 is therefore inhibition of LOC284434 (Accession XP_211460.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284434.

[56967] LOC284444 (Accession XP_209209.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284444 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284444, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284444 BINDING SITE, designated SEQ ID:11942, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also design-

nated SEQ ID:297.

[56968] Another function of GAM7957 is therefore inhibition of LOC284444 (Accession XP_209209.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284444.

[56969] LOC284486 (Accession XP_209231.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284486 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284486, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284486 BINDING SITE, designated SEQ ID:19196, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56970] Another function of GAM7957 is therefore inhibition of LOC284486 (Accession XP_209231.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284486.

[56971] LOC284514 (Accession XP_209244.1) is another

GAM7957 target gene, herein designated TARGET GENE. LOC284514 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284514, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284514 BINDING SITE, designated SEQ ID:15933, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56972] Another function of GAM7957 is therefore inhibition of LOC284514 (Accession XP_209244.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284514.

[56973] LOC284542 (Accession XP_209254.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284542 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC284542, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284542 BINDING SITE, design-

nated SEQ ID:19461, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56974] Another function of GAM7957 is therefore inhibition of LOC284542 (Accession XP_209254.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284542.

[56975] LOC284557 (Accession XP_209256.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284557 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC284557, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284557 BINDING SITE, designated SEQ ID:7964, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56976] Another function of GAM7957 is therefore inhibition of LOC284557 (Accession XP_209256.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC284557.

[56977] LOC284574 (Accession XP_211527.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284574 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284574, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284574 BINDING SITE, designated SEQ ID:8381, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56978] Another function of GAM7957 is therefore inhibition of LOC284574 (Accession XP_211527.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284574.

[56979] LOC284577 (Accession XP_211522.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284577 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284577, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284577 BINDING SITE, designated SEQ ID:15308, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56980] Another function of GAM7957 is therefore inhibition of LOC284577 (Accession XP_211522.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284577.

[56981] LOC284600 (Accession XP_211548.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284600 BINDING SITE1 and LOC284600 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC284600, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284600 BINDING SITE1 and LOC284600 BINDING SITE2, designated SEQ ID:1244 and SEQ ID:16341 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56982] Another function of GAM7957 is therefore inhibition of

LOC284600 (Accession XP_211548.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284600.

[56983] LOC284628 (Accession XP_211561.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284628 BINDING SITE1 and LOC284628 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC284628, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284628 BINDING SITE1 and LOC284628 BINDING SITE2, designated SEQ ID:14786 and SEQ ID:9474 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56984] Another function of GAM7957 is therefore inhibition of LOC284628 (Accession XP_211561.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284628.

[56985] LOC284630 (Accession XP_211562.1) is another GAM7957 target gene, herein designated TARGET GENE.

LOC284630 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC284630, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284630 BINDING SITE, designated SEQ ID:9946, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56986] Another function of GAM7957 is therefore inhibition of LOC284630 (Accession XP_211562.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284630.

[56987] LOC284639 (Accession XP_211567.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284639 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284639, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284639 BINDING SITE, designated SEQ ID:17403, to the nucleotide sequence of

GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56988] Another function of GAM7957 is therefore inhibition of LOC284639 (Accession XP_211567.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284639.

[56989] LOC284650 (Accession XP_211571.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284650 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC284650, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284650 BINDING SITE, designated SEQ ID:9422, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56990] Another function of GAM7957 is therefore inhibition of LOC284650 (Accession XP_211571.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284650.

[56991] LOC284665 (Accession XP_211581.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284665 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC284665, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284665 BINDING SITE, designated SEQ ID:2812, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56992] Another function of GAM7957 is therefore inhibition of LOC284665 (Accession XP_211581.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284665.

[56993] LOC284673 (Accession XP_211591.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284673 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284673, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC284673 BINDING SITE, designated SEQ ID:9421, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56994] Another function of GAM7957 is therefore inhibition of LOC284673 (Accession XP_211591.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284673.

[56995] LOC284707 (Accession XP_211598.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284707 BINDING SITE1 through LOC284707 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC284707, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284707 BINDING SITE1 through LOC284707 BINDING SITE3, designated SEQ ID:8917, SEQ ID:18690 and SEQ ID:15308 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56996] Another function of GAM7957 is therefore inhibition of LOC284707 (Accession XP_211598.1) . Accordingly, utili-

ties of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284707.

[56997] LOC284736 (Accession XP_209343.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284736 BINDING SITE1 and LOC284736 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC284736, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284736 BINDING SITE1 and LOC284736 BINDING SITE2, designated SEQ ID:12933 and SEQ ID:19053 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[56998] Another function of GAM7957 is therefore inhibition of LOC284736 (Accession XP_209343.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284736.

[56999] LOC284757 (Accession XP_211616.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284757 BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by LOC284757, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284757 BINDING SITE, designated SEQ ID:17060, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57000] Another function of GAM7957 is therefore inhibition of LOC284757 (Accession XP_211616.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284757.

[57001] LOC284803 (Accession XP_211642.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284803 BINDING SITE1 through LOC284803 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC284803, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284803 BINDING SITE1 through LOC284803 BINDING SITE3, designated SEQ ID:17328, SEQ ID:9535 and SEQ ID:13751 re-

spectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57002] Another function of GAM7957 is therefore inhibition of LOC284803 (Accession XP_211642.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284803.

[57003] LOC284808 (Accession XP_209372.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284808 BINDING SITE1 through LOC284808 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC284808, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284808 BINDING SITE1 through LOC284808 BINDING SITE3, designated SEQ ID:7759, SEQ ID:18950 and SEQ ID:19941 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57004] Another function of GAM7957 is therefore inhibition of LOC284808 (Accession XP_209372.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC284808.

[57005] LOC284844 (Accession XP_211662.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284844 BINDING SITE1 and LOC284844 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC284844, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284844 BINDING SITE1 and LOC284844 BINDING SITE2, designated SEQ ID:9844 and SEQ ID:3325 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57006] Another function of GAM7957 is therefore inhibition of LOC284844 (Accession XP_211662.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284844.

[57007] LOC284845 (Accession XP_211663.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284845 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284845, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284845 BINDING SITE, designated SEQ ID:9422, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57008] Another function of GAM7957 is therefore inhibition of LOC284845 (Accession XP_211663.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284845.

[57009] LOC284853 (Accession XP_209383.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284853 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284853, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284853 BINDING SITE, designated SEQ ID:15742, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57010] Another function of GAM7957 is therefore inhibition of

LOC284853 (Accession XP_209383.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284853.

[57011] LOC284857 (Accession XP_211671.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284857 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284857, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284857 BINDING SITE, designated SEQ ID:19058, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57012] Another function of GAM7957 is therefore inhibition of LOC284857 (Accession XP_211671.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284857.

[57013] LOC284858 (Accession XP_209386.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284858 BINDING SITE1 through LOC284858 BINDING

SITE4 are target binding sites found in untranslated regions of mRNA encoded by LOC284858, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284858 BINDING SITE1 through LOC284858 BINDING SITE4, designated SEQ ID:2488, SEQ ID:19500, SEQ ID:13155 and SEQ ID:5830 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57014] Another function of GAM7957 is therefore inhibition of LOC284858 (Accession XP_209386.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284858.

[57015] LOC284859 (Accession XP_209384.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC284859 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284859, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284859 BINDING SITE, design-

nated SEQ ID:16401, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57016] Another function of GAM7957 is therefore inhibition of LOC284859 (Accession XP_209384.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284859.

[57017] LOC284861 (Accession XP_211670.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC284861 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC284861, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284861 BINDING SITE, designated SEQ ID:16401, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57018] Another function of GAM7957 is therefore inhibition of LOC284861 (Accession XP_211670.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC284861.

[57019] LOC284862 (Accession XP_211666.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284862 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284862, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284862 BINDING SITE, designated SEQ ID:9439, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57020] Another function of GAM7957 is therefore inhibition of LOC284862 (Accession XP_211666.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284862.

[57021] LOC284873 (Accession XP_209412.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284873 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284873, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284873 BINDING SITE, designated SEQ ID:16401, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57022] Another function of GAM7957 is therefore inhibition of LOC284873 (Accession XP_209412.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284873.

[57023] LOC284899 (Accession XP_211680.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284899 BINDING SITE1 through LOC284899 BINDING SITE4 are target binding sites found in untranslated regions of mRNA encoded by LOC284899, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284899 BINDING SITE1 through LOC284899 BINDING SITE4, designated SEQ ID:17082, SEQ ID:12699, SEQ ID:2520 and SEQ ID:15979 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57024] Another function of GAM7957 is therefore inhibition of LOC284899 (Accession XP_211680.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284899.

[57025] LOC284911 (Accession XP_211684.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284911 BINDING SITE1 and LOC284911 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC284911, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284911 BINDING SITE1 and LOC284911 BINDING SITE2, designated SEQ ID:13631 and SEQ ID:4952 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57026] Another function of GAM7957 is therefore inhibition of LOC284911 (Accession XP_211684.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284911.

[57027] LOC284915 (Accession XP_209410.1) is another

GAM7957 target gene, herein designated TARGET GENE. LOC284915 BINDING SITE1 and LOC284915 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC284915, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284915 BINDING SITE1 and LOC284915 BINDING SITE2, designated SEQ ID:16573 and SEQ ID:15344 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57028] Another function of GAM7957 is therefore inhibition of LOC284915 (Accession XP_209410.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284915.

[57029] LOC284936 (Accession XP_211699.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284936 BINDING SITE1 through LOC284936 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC284936, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the com-

plementarity of the nucleotide sequences of LOC284936 BINDING SITE1 through LOC284936 BINDING SITE3, designated SEQ ID:9420, SEQ ID:17279 and SEQ ID:5093 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57030] Another function of GAM7957 is therefore inhibition of LOC284936 (Accession XP_211699.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284936.

[57031] LOC284939 (Accession XP_211700.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284939 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC284939, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284939 BINDING SITE, designated SEQ ID:14786, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57032] Another function of GAM7957 is therefore inhibition of LOC284939 (Accession XP_211700.1) . Accordingly, utili-

ties of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284939.

[57033] LOC284959 (Accession XP_211708.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284959 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC284959, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284959 BINDING SITE, designated SEQ ID:10463, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57034] Another function of GAM7957 is therefore inhibition of LOC284959 (Accession XP_211708.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284959.

[57035] LOC284972 (Accession XP_211712.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284972 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by

LOC284972, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284972 BINDING SITE, designated SEQ ID:6191, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57036] Another function of GAM7957 is therefore inhibition of LOC284972 (Accession XP_211712.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284972.

[57037] LOC284975 (Accession XP_211711.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284975 BINDING SITE1 and LOC284975 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC284975, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284975 BINDING SITE1 and LOC284975 BINDING SITE2, designated SEQ ID:9420 and SEQ ID:12954 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated

GAM RNA, also designated SEQ ID:297.

[57038] Another function of GAM7957 is therefore inhibition of LOC284975 (Accession XP_211711.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284975.

[57039] LOC284976 (Accession XP_211714.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284976 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284976, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284976 BINDING SITE, designated SEQ ID:10672, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57040] Another function of GAM7957 is therefore inhibition of LOC284976 (Accession XP_211714.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284976.

[57041] LOC284982 (Accession XP_211721.1) is another

GAM7957 target gene, herein designated TARGET GENE. LOC284982 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284982, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284982 BINDING SITE, designated SEQ ID:2521, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57042] Another function of GAM7957 is therefore inhibition of LOC284982 (Accession XP_211721.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284982.

[57043] LOC284993 (Accession XP_211722.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284993 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC284993, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284993 BINDING SITE, design-

nated SEQ ID:13912, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57044] Another function of GAM7957 is therefore inhibition of LOC284993 (Accession XP_211722.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284993.

[57045] LOC284995 (Accession XP_211729.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC284995 BINDING SITE1 and LOC284995 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC284995, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284995 BINDING SITE1 and LOC284995 BINDING SITE2, designated SEQ ID:1706 and SEQ ID:15343 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57046] Another function of GAM7957 is therefore inhibition of LOC284995 (Accession XP_211729.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC284995.

[57047] LOC285043 (Accession XP_211742.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285043 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC285043, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285043 BINDING SITE, designated SEQ ID:9938, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57048] Another function of GAM7957 is therefore inhibition of LOC285043 (Accession XP_211742.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285043.

[57049] LOC285058 (Accession XP_211753.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285058 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285058, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285058 BINDING SITE, designated SEQ ID:10474, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57050] Another function of GAM7957 is therefore inhibition of LOC285058 (Accession XP_211753.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285058.

[57051] LOC285082 (Accession XP_211759.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285082 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285082, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285082 BINDING SITE, designated SEQ ID:470, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57052] Another function of GAM7957 is therefore inhibition of

LOC285082 (Accession XP_211759.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285082.

[57053] LOC285083 (Accession XP_209464.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285083 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285083, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285083 BINDING SITE, designated SEQ ID:19057, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57054] Another function of GAM7957 is therefore inhibition of LOC285083 (Accession XP_209464.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285083.

[57055] LOC285094 (Accession XP_209471.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285094 BINDING SITE is a target binding site found in

the 5' untranslated region of mRNA encoded by LOC285094, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285094 BINDING SITE, designated SEQ ID:8468, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57056] Another function of GAM7957 is therefore inhibition of LOC285094 (Accession XP_209471.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285094.

[57057] LOC285103 (Accession XP_211766.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285103 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC285103, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285103 BINDING SITE, designated SEQ ID:4060, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also design-

nated SEQ ID:297.

[57058] Another function of GAM7957 is therefore inhibition of LOC285103 (Accession XP_211766.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285103.

[57059] LOC285108 (Accession XP_209478.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285108 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285108, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285108 BINDING SITE, designated SEQ ID:12145, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57060] Another function of GAM7957 is therefore inhibition of LOC285108 (Accession XP_209478.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285108.

[57061] LOC285125 (Accession XP_211769.1) is another

GAM7957 target gene, herein designated TARGET GENE. LOC285125 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285125, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285125 BINDING SITE, designated SEQ ID:629, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57062] Another function of GAM7957 is therefore inhibition of LOC285125 (Accession XP_211769.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285125.

[57063] LOC285127 (Accession XP_211771.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285127 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285127, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285127 BINDING SITE, design-

nated SEQ ID:2936, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57064] Another function of GAM7957 is therefore inhibition of LOC285127 (Accession XP_211771.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285127.

[57065] LOC285151 (Accession XP_211782.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285151 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC285151, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285151 BINDING SITE, designated SEQ ID:9735, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57066] Another function of GAM7957 is therefore inhibition of LOC285151 (Accession XP_211782.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC285151.

[57067] LOC285166 (Accession XP_211791.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285166 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285166, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285166 BINDING SITE, designated SEQ ID:12791, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57068] Another function of GAM7957 is therefore inhibition of LOC285166 (Accession XP_211791.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285166.

[57069] LOC285167 (Accession XP_211790.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285167 BINDING SITE1 through LOC285167 BINDING SITE4 are target binding sites found in untranslated regions of mRNA encoded by LOC285167, corresponding to target binding sites such as BINDING SITE I, BINDING SITE

II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285167 BINDING SITE1 through LOC285167 BINDING SITE4, designated SEQ ID:7413, SEQ ID:7557, SEQ ID:18453 and SEQ ID:15370 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57070] Another function of GAM7957 is therefore inhibition of LOC285167 (Accession XP_211790.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285167.

[57071] LOC285171 (Accession XP_211799.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285171 BINDING SITE1 through LOC285171 BINDING SITE4 are target binding sites found in untranslated regions of mRNA encoded by LOC285171, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285171 BINDING SITE1 through LOC285171 BINDING SITE4, designated SEQ ID:5046, SEQ ID:19794, SEQ ID:13690 and SEQ ID:13155 respectively, to the nucleotide sequence of

GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57072] Another function of GAM7957 is therefore inhibition of LOC285171 (Accession XP_211799.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285171.

[57073] LOC285216 (Accession XP_209520.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285216 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC285216, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285216 BINDING SITE, designated SEQ ID:13065, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57074] Another function of GAM7957 is therefore inhibition of LOC285216 (Accession XP_209520.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285216.

[57075] LOC285219 (Accession XP_209518.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285219 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285219, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285219 BINDING SITE, designated SEQ ID:12792, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57076] Another function of GAM7957 is therefore inhibition of LOC285219 (Accession XP_209518.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285219.

[57077] LOC285222 (Accession XP_211809.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285222 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC285222, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC285222 BINDING SITE, designated SEQ ID:9913, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57078] Another function of GAM7957 is therefore inhibition of LOC285222 (Accession XP_211809.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285222.

[57079] LOC285230 (Accession XP_211814.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285230 BINDING SITE1 and LOC285230 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC285230, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285230 BINDING SITE1 and LOC285230 BINDING SITE2, designated SEQ ID:6423 and SEQ ID:2944 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57080] Another function of GAM7957 is therefore inhibition of LOC285230 (Accession XP_211814.1) . Accordingly, utili-

ties of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285230.

[57081] LOC285263 (Accession XP_209537.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285263 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285263, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285263 BINDING SITE, designated SEQ ID:7927, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57082] Another function of GAM7957 is therefore inhibition of LOC285263 (Accession XP_209537.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285263.

[57083] LOC285295 (Accession XP_211833.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285295 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by

LOC285295, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285295 BINDING SITE, designated SEQ ID:5047, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57084] Another function of GAM7957 is therefore inhibition of LOC285295 (Accession XP_211833.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285295.

[57085] LOC285309 (Accession XP_211839.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285309 BINDING SITE1 and LOC285309 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC285309, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285309 BINDING SITE1 and LOC285309 BINDING SITE2, designated SEQ ID:1492 and SEQ ID:9203 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57086] Another function of GAM7957 is therefore inhibition of LOC285309 (Accession XP_211839.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285309.

[57087] LOC285332 (Accession XP_211845.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285332 BINDING SITE1 through LOC285332 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC285332, corresponding to target binding sites such as BINDING SITE I, BINDING SITE

II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285332 BINDING SITE1 through LOC285332 BINDING SITE3, designated SEQ ID:15405, SEQ ID:10634 and SEQ ID:10559 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57088] Another function of GAM7957 is therefore inhibition of LOC285332 (Accession XP_211845.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285332.

[57089] LOC285359 (Accession XP_211858.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285359 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285359, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285359 BINDING SITE, designated SEQ ID:15984, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57090] Another function of GAM7957 is therefore inhibition of LOC285359 (Accession XP_211858.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285359.

[57091] LOC285376 (Accession XP_211864.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285376 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285376, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285376 BINDING SITE, designated SEQ ID:18691, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57092] Another function of GAM7957 is therefore inhibition of LOC285376 (Accession XP_211864.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285376.

[57093] LOC285378 (Accession XP_211859.1) is another GAM7957 target gene, herein designated TARGET GENE.

LOC285378 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC285378, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285378 BINDING SITE, designated SEQ ID:10435, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57094] Another function of GAM7957 is therefore inhibition of LOC285378 (Accession XP_211859.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285378.

[57095] LOC285379 (Accession XP_211868.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285379 BINDING SITE1 and LOC285379 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC285379, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285379 BINDING SITE1 and LOC285379 BINDING SITE2, design-

nated SEQ ID:1492 and SEQ ID:9203 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57096] Another function of GAM7957 is therefore inhibition of LOC285379 (Accession XP_211868.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285379.

[57097] LOC285387 (Accession XP_209588.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285387 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285387, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285387 BINDING SITE, designated SEQ ID:15219, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57098] Another function of GAM7957 is therefore inhibition of LOC285387 (Accession XP_209588.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC285387.

[57099] LOC285395 (Accession XP_211875.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285395 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285395, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285395 BINDING SITE, designated SEQ ID:14204, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57100] Another function of GAM7957 is therefore inhibition of LOC285395 (Accession XP_211875.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285395.

[57101] LOC285404 (Accession XP_211885.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285404 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285404, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285404 BINDING SITE, designated SEQ ID:15520, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57102] Another function of GAM7957 is therefore inhibition of LOC285404 (Accession XP_211885.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285404.

[57103] LOC285408 (Accession XP_211886.3) is another GAM7957 target gene, herein designated TARGET GENE. LOC285408 BINDING SITE1 and LOC285408 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC285408, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285408 BINDING SITE1 and LOC285408 BINDING SITE2, designated SEQ ID:14360 and SEQ ID:14913 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57104] Another function of GAM7957 is therefore inhibition of

LOC285408 (Accession XP_211886.3) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285408.

[57105] LOC285447 (Accession XP_211900.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285447 BINDING SITE1 through LOC285447 BINDING SITE4 are target binding sites found in untranslated regions of mRNA encoded by LOC285447, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285447 BINDING SITE1 through LOC285447 BINDING SITE4, designated SEQ ID:19799, SEQ ID:8585, SEQ ID:1571 and SEQ ID:5830 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57106] Another function of GAM7957 is therefore inhibition of LOC285447 (Accession XP_211900.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285447.

[57107] LOC285465 (Accession XP_209622.1) is another

GAM7957 target gene, herein designated TARGET GENE. LOC285465 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285465, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285465 BINDING SITE, designated SEQ ID:13061, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57108] Another function of GAM7957 is therefore inhibition of LOC285465 (Accession XP_209622.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285465.

[57109] LOC285481 (Accession XP_211912.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285481 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC285481, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285481 BINDING SITE, design-

nated SEQ ID:8189, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57110] Another function of GAM7957 is therefore inhibition of LOC285481 (Accession XP_211912.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285481.

[57111] LOC285484 (Accession XP_209630.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285484 BINDING SITE1 and LOC285484 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC285484, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285484 BINDING SITE1 and LOC285484 BINDING SITE2, designated SEQ ID:6846 and SEQ ID:10306 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57112] Another function of GAM7957 is therefore inhibition of LOC285484 (Accession XP_209630.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC285484.

[57113] LOC285485 (Accession XP_211913.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285485 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC285485, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285485 BINDING SITE, designated SEQ ID:961, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57114] Another function of GAM7957 is therefore inhibition of LOC285485 (Accession XP_211913.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285485.

[57115] LOC285495 (Accession XP_211918.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285495 BINDING SITE1 and LOC285495 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC285495, corresponding to

target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285495 BINDING SITE1 and LOC285495 BINDING SITE2, designated SEQ ID:18458 and SEQ ID:8855 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57116] Another function of GAM7957 is therefore inhibition of LOC285495 (Accession XP_211918.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285495.

[57117] LOC285531 (Accession XP_211929.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285531 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC285531, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285531 BINDING SITE, designated SEQ ID:837, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57118] Another function of GAM7957 is therefore inhibition of LOC285531 (Accession XP_211929.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285531.

[57119] LOC285592 (Accession XP_209669.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285592 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC285592, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285592 BINDING SITE, designated SEQ ID:13066, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57120] Another function of GAM7957 is therefore inhibition of LOC285592 (Accession XP_209669.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285592.

[57121] LOC285594 (Accession XP_211946.2) is another GAM7957 target gene, herein designated TARGET GENE.

LOC285594 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285594, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285594 BINDING SITE, designated SEQ ID:13062, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57122] Another function of GAM7957 is therefore inhibition of LOC285594 (Accession XP_211946.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285594.

[57123] LOC285608 (Accession XP_211952.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285608 BINDING SITE1 through LOC285608 BINDING SITE4 are target binding sites found in untranslated regions of mRNA encoded by LOC285608, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285608 BINDING SITE1 through LOC285608 BINDING SITE4, des-

ignated SEQ ID:2726, SEQ ID:4337, SEQ ID:17557 and SEQ ID:1965 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57124] Another function of GAM7957 is therefore inhibition of LOC285608 (Accession XP_211952.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285608.

[57125] LOC285614 (Accession XP_211953.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285614 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285614, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285614 BINDING SITE, designated SEQ ID:10438, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57126] Another function of GAM7957 is therefore inhibition of LOC285614 (Accession XP_211953.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC285614.

[57127] LOC285617 (Accession XP_211950.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285617 BINDING SITE1 and LOC285617 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC285617, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285617 BINDING SITE1 and LOC285617 BINDING SITE2, designated SEQ ID:15207 and SEQ ID:11452 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57128] Another function of GAM7957 is therefore inhibition of LOC285617 (Accession XP_211950.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285617.

[57129] LOC285665 (Accession XP_211978.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285665 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by

LOC285665, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285665 BINDING SITE, designated SEQ ID:10435, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57130] Another function of GAM7957 is therefore inhibition of LOC285665 (Accession XP_211978.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285665.

[57131] LOC285666 (Accession XP_211977.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285666 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285666, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285666 BINDING SITE, designated SEQ ID:13322, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57132] Another function of GAM7957 is therefore inhibition of LOC285666 (Accession XP_211977.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285666.

[57133] LOC285676 (Accession XP_209718.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285676 BINDING SITE1 and LOC285676 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC285676, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285676 BINDING SITE1 and LOC285676 BINDING SITE2, designated SEQ ID:15108 and SEQ ID:10438 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57134] Another function of GAM7957 is therefore inhibition of LOC285676 (Accession XP_209718.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285676.

[57135] LOC285707 (Accession XP_211987.1) is another

GAM7957 target gene, herein designated TARGET GENE. LOC285707 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC285707, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285707 BINDING SITE, designated SEQ ID:2856, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57136] Another function of GAM7957 is therefore inhibition of LOC285707 (Accession XP_211987.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285707.

[57137] LOC285713 (Accession XP_211992.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285713 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285713, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285713 BINDING SITE, design-

nated SEQ ID:12495, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57138] Another function of GAM7957 is therefore inhibition of LOC285713 (Accession XP_211992.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285713.

[57139] LOC285727 (Accession XP_212000.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285727 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285727, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285727 BINDING SITE, designated SEQ ID:1146, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57140] Another function of GAM7957 is therefore inhibition of LOC285727 (Accession XP_212000.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC285727.

[57141] LOC285745 (Accession XP_212007.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285745 BINDING SITE1 and LOC285745 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC285745, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285745 BINDING SITE1 and LOC285745 BINDING SITE2, designated SEQ ID:4824 and SEQ ID:19057 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57142] Another function of GAM7957 is therefore inhibition of LOC285745 (Accession XP_212007.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285745.

[57143] LOC285747 (Accession XP_209742.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285747 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285747, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285747 BINDING SITE, designated SEQ ID:9762, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57144] Another function of GAM7957 is therefore inhibition of LOC285747 (Accession XP_209742.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285747.

[57145] LOC285771 (Accession XP_212015.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285771 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC285771, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285771 BINDING SITE, designated SEQ ID:10490, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57146] Another function of GAM7957 is therefore inhibition of

LOC285771 (Accession XP_212015.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285771.

[57147] LOC285806 (Accession XP_212028.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285806 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285806, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285806 BINDING SITE, designated SEQ ID:2460, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57148] Another function of GAM7957 is therefore inhibition of LOC285806 (Accession XP_212028.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285806.

[57149] LOC285833 (Accession XP_209790.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285833 BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by LOC285833, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285833 BINDING SITE, designated SEQ ID:5928, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57150] Another function of GAM7957 is therefore inhibition of LOC285833 (Accession XP_209790.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285833.

[57151] LOC285842 (Accession XP_212041.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285842 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285842, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285842 BINDING SITE, designated SEQ ID:13726, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also design-

nated SEQ ID:297.

[57152] Another function of GAM7957 is therefore inhibition of LOC285842 (Accession XP_212041.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285842.

[57153] LOC285854 (Accession XP_209770.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285854 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285854, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285854 BINDING SITE, designated SEQ ID:8380, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57154] Another function of GAM7957 is therefore inhibition of LOC285854 (Accession XP_209770.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285854.

[57155] LOC285855 (Accession XP_209769.1) is another

GAM7957 target gene, herein designated TARGET GENE. LOC285855 BINDING SITE1 and LOC285855 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC285855, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285855 BINDING SITE1 and LOC285855 BINDING SITE2, designated SEQ ID:3330 and SEQ ID:5929 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57156] Another function of GAM7957 is therefore inhibition of LOC285855 (Accession XP_209769.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285855.

[57157] LOC285859 (Accession XP_209775.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285859 BINDING SITE1 and LOC285859 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC285859, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the com-

plementarity of the nucleotide sequences of LOC285859 BINDING SITE1 and LOC285859 BINDING SITE2, designated SEQ ID:4206 and SEQ ID:15343 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57158] Another function of GAM7957 is therefore inhibition of LOC285859 (Accession XP_209775.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285859.

[57159] LOC285869 (Accession XP_212058.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285869 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285869, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285869 BINDING SITE, designated SEQ ID:14367, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57160] Another function of GAM7957 is therefore inhibition of LOC285869 (Accession XP_212058.1) . Accordingly, utili-

ties of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285869.

[57161] LOC285887 (Accession XP_212065.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285887 BINDING SITE1 and LOC285887 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC285887, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285887 BINDING SITE1 and LOC285887 BINDING SITE2, designated SEQ ID:13063 and SEQ ID:1492 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57162] Another function of GAM7957 is therefore inhibition of LOC285887 (Accession XP_212065.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285887.

[57163] LOC285909 (Accession XP_209811.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285909 BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by LOC285909, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285909 BINDING SITE, designated SEQ ID:11641, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57164] Another function of GAM7957 is therefore inhibition of LOC285909 (Accession XP_209811.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285909.

[57165] LOC285912 (Accession XP_212078.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285912 BINDING SITE1 through LOC285912 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC285912, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285912 BINDING SITE1 through LOC285912 BINDING SITE3, designated SEQ ID:2159, SEQ ID:16843 and SEQ ID:16368 re-

spectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57166] Another function of GAM7957 is therefore inhibition of LOC285912 (Accession XP_212078.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285912.

[57167] LOC285913 (Accession XP_212074.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285913 BINDING SITE1 through LOC285913 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC285913, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285913 BINDING SITE1 through LOC285913 BINDING SITE3, designated SEQ ID:16843, SEQ ID:19036 and SEQ ID:16369 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57168] Another function of GAM7957 is therefore inhibition of LOC285913 (Accession XP_212074.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC285913.

[57169] LOC285914 (Accession XP_209810.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285914 BINDING SITE1 and LOC285914 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC285914, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285914 BINDING SITE1 and LOC285914 BINDING SITE2, designated SEQ ID:2306 and SEQ ID:7908 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57170] Another function of GAM7957 is therefore inhibition of LOC285914 (Accession XP_209810.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285914.

[57171] LOC285916 (Accession XP_212082.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285916 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by

LOC285916, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285916 BINDING SITE, designated SEQ ID:475, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57172] Another function of GAM7957 is therefore inhibition of LOC285916 (Accession XP_212082.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285916.

[57173] LOC285920 (Accession XP_212091.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285920 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC285920, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285920 BINDING SITE, designated SEQ ID:15752, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57174] Another function of GAM7957 is therefore inhibition of LOC285920 (Accession XP_212091.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285920.

[57175] LOC285923 (Accession XP_212104.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285923 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285923, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285923 BINDING SITE, designated SEQ ID:9763, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57176] Another function of GAM7957 is therefore inhibition of LOC285923 (Accession XP_212104.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285923.

[57177] LOC285924 (Accession XP_209816.1) is another GAM7957 target gene, herein designated TARGET GENE.

LOC285924 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285924, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285924 BINDING SITE, designated SEQ ID:18617, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57178] Another function of GAM7957 is therefore inhibition of LOC285924 (Accession XP_209816.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285924.

[57179] LOC285931 (Accession NP_777609.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285931 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285931, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285931 BINDING SITE, designated SEQ ID:15676, to the nucleotide sequence of

GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57180] Another function of GAM7957 is therefore inhibition of LOC285931 (Accession NP_777609.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285931.

[57181] LOC285953 (Accession XP_209820.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285953 BINDING SITE1 and LOC285953 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC285953, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285953 BINDING SITE1 and LOC285953 BINDING SITE2, designated SEQ ID:7352 and SEQ ID:9781 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57182] Another function of GAM7957 is therefore inhibition of LOC285953 (Accession XP_209820.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC285953.

[57183] LOC285960 (Accession XP_212088.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285960 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285960, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285960 BINDING SITE, designated SEQ ID:18690, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57184] Another function of GAM7957 is therefore inhibition of LOC285960 (Accession XP_212088.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285960.

[57185] LOC285987 (Accession XP_212127.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285987 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285987, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285987 BINDING SITE, designated SEQ ID:3055, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57186] Another function of GAM7957 is therefore inhibition of LOC285987 (Accession XP_212127.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285987.

[57187] LOC285989 (Accession XP_212111.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285989 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC285989, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285989 BINDING SITE, designated SEQ ID:11322, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57188] Another function of GAM7957 is therefore inhibition of LOC285989 (Accession XP_212111.1) . Accordingly, utili-

ties of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285989.

[57189] LOC285996 (Accession XP_212128.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC285996 BINDING SITE1 through LOC285996 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC285996, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285996 BINDING SITE1 through LOC285996 BINDING SITE3, designated SEQ ID:15983, SEQ ID:13066 and SEQ ID:15893 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57190] Another function of GAM7957 is therefore inhibition of LOC285996 (Accession XP_212128.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285996.

[57191] LOC286007 (Accession XP_212133.1) is another GAM7957 target gene, herein designated TARGET GENE.

LOC286007 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286007, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286007 BINDING SITE, designated SEQ ID:4082, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57192] Another function of GAM7957 is therefore inhibition of LOC286007 (Accession XP_212133.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286007.

[57193] LOC286029 (Accession XP_209866.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC286029 BINDING SITE1 and LOC286029 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC286029, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286029 BINDING SITE1 and LOC286029 BINDING SITE2, design-

nated SEQ ID:19031 and SEQ ID:11466 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57194] Another function of GAM7957 is therefore inhibition of LOC286029 (Accession XP_209866.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286029.

[57195] LOC286030 (Accession XP_209868.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC286030 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286030, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286030 BINDING SITE, designated SEQ ID:925, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57196] Another function of GAM7957 is therefore inhibition of LOC286030 (Accession XP_209868.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC286030.

[57197] LOC286039 (Accession XP_209873.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC286039 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286039, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286039 BINDING SITE, designated SEQ ID:925, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57198] Another function of GAM7957 is therefore inhibition of LOC286039 (Accession XP_209873.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286039.

[57199] LOC286047 (Accession XP_209872.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC286047 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286047, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286047 BINDING SITE, designated SEQ ID:4734, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57200] Another function of GAM7957 is therefore inhibition of LOC286047 (Accession XP_209872.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286047.

[57201] LOC286048 (Accession XP_212141.3) is another GAM7957 target gene, herein designated TARGET GENE. LOC286048 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286048, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286048 BINDING SITE, designated SEQ ID:13065, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57202] Another function of GAM7957 is therefore inhibition of LOC286048 (Accession XP_212141.3) . Accordingly, utili-

ties of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286048.

[57203] LOC286075 (Accession NP_776192.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC286075 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286075, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286075 BINDING SITE, designated SEQ ID:9871, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57204] Another function of GAM7957 is therefore inhibition of LOC286075 (Accession NP_776192.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286075.

[57205] LOC286112 (Accession XP_212176.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC286112 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by

LOC286112, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286112 BINDING SITE, designated SEQ ID:4600, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57206] Another function of GAM7957 is therefore inhibition of LOC286112 (Accession XP_212176.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286112.

[57207] LOC286126 (Accession XP_212185.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC286126 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286126, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286126 BINDING SITE, designated SEQ ID:8922, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57208] Another function of GAM7957 is therefore inhibition of LOC286126 (Accession XP_212185.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286126.

[57209] LOC286147 (Accession XP_212199.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC286147 BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by LOC286147, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286147 BINDING SITE, designated SEQ ID:10132, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57210] Another function of GAM7957 is therefore inhibition of LOC286147 (Accession XP_212199.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286147.

[57211] LOC286154 (Accession XP_212204.1) is another GAM7957 target gene, herein designated TARGET GENE.

LOC286154 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC286154, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286154 BINDING SITE, designated SEQ ID:2949, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57212] Another function of GAM7957 is therefore inhibition of LOC286154 (Accession XP_212204.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286154.

[57213] LOC286166 (Accession XP_209925.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC286166 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC286166, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286166 BINDING SITE, designated SEQ ID:9764, to the nucleotide sequence of

GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57214] Another function of GAM7957 is therefore inhibition of LOC286166 (Accession XP_209925.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286166.

[57215] LOC286184 (Accession XP_212216.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC286184 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC286184, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286184 BINDING SITE, designated SEQ ID:6044, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57216] Another function of GAM7957 is therefore inhibition of LOC286184 (Accession XP_212216.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286184.

[57217] LOC286186 (Accession XP_212219.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC286186 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286186, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286186 BINDING SITE, designated SEQ ID:3979, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57218] Another function of GAM7957 is therefore inhibition of LOC286186 (Accession XP_212219.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286186.

[57219] LOC286188 (Accession XP_209933.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC286188 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286188, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC286188 BINDING SITE, designated SEQ ID:17423, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57220] Another function of GAM7957 is therefore inhibition of LOC286188 (Accession XP_209933.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286188.

[57221] LOC286197 (Accession XP_209940.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC286197 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286197, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286197 BINDING SITE, designated SEQ ID:12144, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57222] Another function of GAM7957 is therefore inhibition of LOC286197 (Accession XP_209940.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC286197.

[57223] LOC286206 (Accession XP_209953.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC286206 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286206, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286206 BINDING SITE, designated SEQ ID:11327, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57224] Another function of GAM7957 is therefore inhibition of LOC286206 (Accession XP_209953.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286206.

[57225] LOC286208 (Accession XP_212230.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC286208 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286208, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286208 BINDING SITE, designated SEQ ID:13066, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57226] Another function of GAM7957 is therefore inhibition of LOC286208 (Accession XP_212230.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286208.

[57227] LOC286218 (Accession XP_212235.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC286218 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286218, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286218 BINDING SITE, designated SEQ ID:5322, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57228] Another function of GAM7957 is therefore inhibition of

LOC286218 (Accession XP_212235.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286218.

[57229] LOC286219 (Accession XP_212236.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC286219 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286219, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286219 BINDING SITE, designated SEQ ID:19821, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57230] Another function of GAM7957 is therefore inhibition of LOC286219 (Accession XP_212236.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286219.

[57231] LOC286235 (Accession XP_212238.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC286235 BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by LOC286235, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286235 BINDING SITE, designated SEQ ID:8306, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57232] Another function of GAM7957 is therefore inhibition of LOC286235 (Accession XP_212238.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286235.

[57233] LOC286237 (Accession XP_212241.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC286237 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286237, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286237 BINDING SITE, designated SEQ ID:12289, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also design-

nated SEQ ID:297.

[57234] Another function of GAM7957 is therefore inhibition of LOC286237 (Accession XP_212241.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286237.

[57235] LOC286255 (Accession XP_209977.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC286255 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC286255, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286255 BINDING SITE, designated SEQ ID:13199, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57236] Another function of GAM7957 is therefore inhibition of LOC286255 (Accession XP_209977.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286255.

[57237] LOC286258 (Accession XP_209972.1) is another

GAM7957 target gene, herein designated TARGET GENE. LOC286258 BINDING SITE1 and LOC286258 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC286258, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286258 BINDING SITE1 and LOC286258 BINDING SITE2, designated SEQ ID:10659 and SEQ ID:17108 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57238] Another function of GAM7957 is therefore inhibition of LOC286258 (Accession XP_209972.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286258.

[57239] LOC286260 (Accession XP_209976.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC286260 BINDING SITE1 and LOC286260 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC286260, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the com-

plementarity of the nucleotide sequences of LOC286260 BINDING SITE1 and LOC286260 BINDING SITE2, designated SEQ ID:15984 and SEQ ID:2924 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57240] Another function of GAM7957 is therefore inhibition of LOC286260 (Accession XP_209976.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286260.

[57241] LOC286337 (Accession XP_212274.3) is another GAM7957 target gene, herein designated TARGET GENE. LOC286337 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286337, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286337 BINDING SITE, designated SEQ ID:15675, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57242] Another function of GAM7957 is therefore inhibition of LOC286337 (Accession XP_212274.3) . Accordingly, utili-

ties of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286337.

[57243] LOC286341 (Accession XP_212278.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC286341 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286341, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286341 BINDING SITE, designated SEQ ID:7590, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57244] Another function of GAM7957 is therefore inhibition of LOC286341 (Accession XP_212278.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286341.

[57245] LOC286356 (Accession XP_212290.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC286356 BINDING SITE1 and LOC286356 BINDING SITE2 are target binding sites found in untranslated re-

gions of mRNA encoded by LOC286356, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286356 BINDING SITE1 and LOC286356 BINDING SITE2, designated SEQ ID:16262 and SEQ ID:3561 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57246] Another function of GAM7957 is therefore inhibition of LOC286356 (Accession XP_212290.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286356.

[57247] LOC286372 (Accession XP_212294.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC286372 BINDING SITE1 and LOC286372 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC286372, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286372 BINDING SITE1 and LOC286372 BINDING SITE2, designated SEQ ID:13155 and SEQ ID:9990 respectively, to the

nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57248] Another function of GAM7957 is therefore inhibition of LOC286372 (Accession XP_212294.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286372.

[57249] LOC286374 (Accession XP_212293.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC286374 BINDING SITE1 and LOC286374 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC286374, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286374 BINDING SITE1 and LOC286374 BINDING SITE2, designated SEQ ID:15343 and SEQ ID:14789 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57250] Another function of GAM7957 is therefore inhibition of LOC286374 (Accession XP_212293.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC286374.

[57251] LOC286376 (Accession XP_210027.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC286376 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286376, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286376 BINDING SITE, designated SEQ ID:18691, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57252] Another function of GAM7957 is therefore inhibition of LOC286376 (Accession XP_210027.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286376.

[57253] LOC286395 (Accession XP_212308.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC286395 BINDING SITE1 through LOC286395 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC286395, corresponding to target binding sites such as BINDING SITE I, BINDING SITE

II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286395 BINDING SITE1 through LOC286395 BINDING SITE3, designated SEQ ID:14790, SEQ ID:3091 and SEQ ID:13180 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57254] Another function of GAM7957 is therefore inhibition of LOC286395 (Accession XP_212308.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286395.

[57255] LOC286404 (Accession XP_210036.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC286404 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by LOC286404, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286404 BINDING SITE, designated SEQ ID:7351, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57256] Another function of GAM7957 is therefore inhibition of

LOC286404 (Accession XP_210036.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286404.

[57257] LOC286411 (Accession XP_212312.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC286411 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286411, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286411 BINDING SITE, designated SEQ ID:19200, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57258] Another function of GAM7957 is therefore inhibition of LOC286411 (Accession XP_212312.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286411.

[57259] LOC286416 (Accession XP_210041.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC286416 BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by LOC286416, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286416 BINDING SITE, designated SEQ ID:3830, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57260] Another function of GAM7957 is therefore inhibition of LOC286416 (Accession XP_210041.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286416.

[57261] LOC286431 (Accession XP_212316.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC286431 BINDING SITE1 and LOC286431 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC286431, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286431 BINDING SITE1 and LOC286431 BINDING SITE2, designated SEQ ID:8014 and SEQ ID:6817 respectively, to the

nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57262] Another function of GAM7957 is therefore inhibition of LOC286431 (Accession XP_212316.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286431.

[57263] LOC286435 (Accession XP_210047.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC286435 BINDING SITE1 through LOC286435 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC286435, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286435 BINDING SITE1 through LOC286435 BINDING SITE3, designated SEQ ID:9769, SEQ ID:13491 and SEQ ID:5210 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57264] Another function of GAM7957 is therefore inhibition of LOC286435 (Accession XP_210047.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC286435.

[57265] LOC286470 (Accession XP_212325.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC286470 BINDING SITE1 and LOC286470 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC286470, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286470 BINDING SITE1 and LOC286470 BINDING SITE2, designated SEQ ID:17423 and SEQ ID:6500 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57266] Another function of GAM7957 is therefore inhibition of LOC286470 (Accession XP_212325.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286470.

[57267] LOC286486 (Accession XP_210077.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC286486 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286486, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286486 BINDING SITE, designated SEQ ID:2822, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57268] Another function of GAM7957 is therefore inhibition of LOC286486 (Accession XP_210077.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286486.

[57269] LOC286530 (Accession NP_835230.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC286530 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by LOC286530, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286530 BINDING SITE, designated SEQ ID:8258, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57270] Another function of GAM7957 is therefore inhibition of

LOC286530 (Accession NP_835230.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286530.

[57271] LOC338545 (Accession XP_294650.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC338545 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC338545, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338545 BINDING SITE, designated SEQ ID:11411, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57272] Another function of GAM7957 is therefore inhibition of LOC338545 (Accession XP_294650.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC338545.

[57273] LOC338549 (Accession XP_294651.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC338549 BINDING SITE1 through LOC338549 BINDING

SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC338549, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338549 BINDING SITE1 through LOC338549 BINDING SITE3, designated SEQ ID:5588, SEQ ID:10572 and SEQ ID:3956 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57274] Another function of GAM7957 is therefore inhibition of LOC338549 (Accession XP_294651.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC338549.

[57275] LOC338593 (Accession XP_290481.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC338593 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC338593, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338593 BINDING SITE, designated SEQ ID:7048, to the nucleotide sequence of

GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57276] Another function of GAM7957 is therefore inhibition of LOC338593 (Accession XP_290481.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC338593.

[57277] LOC338594 (Accession XP_294660.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC338594 BINDING SITE1 and LOC338594 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC338594, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338594 BINDING SITE1 and LOC338594 BINDING SITE2, designated SEQ ID:17423 and SEQ ID:15837 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57278] Another function of GAM7957 is therefore inhibition of LOC338594 (Accession XP_294660.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC338594.

[57279] LOC338604 (Accession XP_294665.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC338604 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC338604, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338604 BINDING SITE, designated SEQ ID:4376, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57280] Another function of GAM7957 is therefore inhibition of LOC338604 (Accession XP_294665.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC338604.

[57281] LOC338690 (Accession XP_290518.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC338690 BINDING SITE1 and LOC338690 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC338690, corresponding to target binding sites such as BINDING SITE I, BINDING SITE

II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338690 BINDING SITE1 and LOC338690 BINDING SITE2, designated SEQ ID:14785 and SEQ ID:5830 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57282] Another function of GAM7957 is therefore inhibition of LOC338690 (Accession XP_290518.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC338690.

[57283] LOC338837 (Accession XP_294725.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC338837 BINDING SITE1 and LOC338837 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC338837, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338837 BINDING SITE1 and LOC338837 BINDING SITE2, designated SEQ ID:12726 and SEQ ID:18690 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57284] Another function of GAM7957 is therefore inhibition of LOC338837 (Accession XP_294725.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC338837.

[57285] LOC338866 (Accession XP_294736.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC338866 BINDING SITE1 and LOC338866 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC338866, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338866 BINDING SITE1 and LOC338866 BINDING SITE2, designated SEQ ID:9815 and SEQ ID:11040 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57286] Another function of GAM7957 is therefore inhibition of LOC338866 (Accession XP_294736.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC338866.

[57287] LOC338910 (Accession XP_290630.1) is another

GAM7957 target gene, herein designated TARGET GENE. LOC338910 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC338910, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338910 BINDING SITE, designated SEQ ID:6154, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57288] Another function of GAM7957 is therefore inhibition of LOC338910 (Accession XP_290630.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC338910.

[57289] LOC338923 (Accession XP_294742.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC338923 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC338923, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338923 BINDING SITE, design-

nated SEQ ID:15384, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57290] Another function of GAM7957 is therefore inhibition of LOC338923 (Accession XP_294742.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC338923.

[57291] LOC338963 (Accession XP_294757.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC338963 BINDING SITE1 and LOC338963 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC338963, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338963 BINDING SITE1 and LOC338963 BINDING SITE2, designated SEQ ID:6095 and SEQ ID:12559 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57292] Another function of GAM7957 is therefore inhibition of LOC338963 (Accession XP_294757.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC338963.

[57293] LOC338976 (Accession XP_294762.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC338976 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC338976, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338976 BINDING SITE, designated SEQ ID:17403, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57294] Another function of GAM7957 is therefore inhibition of LOC338976 (Accession XP_294762.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC338976.

[57295] LOC338991 (Accession XP_290663.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC338991 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC338991, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338991 BINDING SITE, designated SEQ ID:10439, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57296] Another function of GAM7957 is therefore inhibition of LOC338991 (Accession XP_290663.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC338991.

[57297] LOC338999 (Accession XP_290659.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC338999 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC338999, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338999 BINDING SITE, designated SEQ ID:10439, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57298] Another function of GAM7957 is therefore inhibition of

LOC338999 (Accession XP_290659.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC338999.

[57299] LOC339059 (Accession XP_290682.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC339059 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339059, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339059 BINDING SITE, designated SEQ ID:7867, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57300] Another function of GAM7957 is therefore inhibition of LOC339059 (Accession XP_290682.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339059.

[57301] LOC339071 (Accession XP_294800.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC339071 BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by LOC339071, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339071 BINDING SITE, designated SEQ ID:14359, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57302] Another function of GAM7957 is therefore inhibition of LOC339071 (Accession XP_294800.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339071.

[57303] LOC339078 (Accession XP_290692.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC339078 BINDING SITE1 and LOC339078 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC339078, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339078 BINDING SITE1 and LOC339078 BINDING SITE2, designated SEQ ID:6790 and SEQ ID:12011 respectively, to the

nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57304] Another function of GAM7957 is therefore inhibition of LOC339078 (Accession XP_290692.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339078.

[57305] LOC339083 (Accession XP_290697.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC339083 BINDING SITE1 through LOC339083 BINDING SITE4 are target binding sites found in untranslated regions of mRNA encoded by LOC339083, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339083 BINDING SITE1 through LOC339083 BINDING SITE4, designated SEQ ID:12337, SEQ ID:13093, SEQ ID:9420 and SEQ ID:2987 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57306] Another function of GAM7957 is therefore inhibition of LOC339083 (Accession XP_290697.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC339083.

[57307] LOC339111 (Accession XP_294813.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC339111 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339111, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339111 BINDING SITE, designated SEQ ID:10720, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57308] Another function of GAM7957 is therefore inhibition of LOC339111 (Accession XP_294813.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339111.

[57309] LOC339130 (Accession XP_290723.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC339130 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC339130, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339130 BINDING SITE, designated SEQ ID:10489, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57310] Another function of GAM7957 is therefore inhibition of LOC339130 (Accession XP_290723.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339130.

[57311] LOC339146 (Accession XP_294825.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC339146 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339146, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339146 BINDING SITE, designated SEQ ID:19056, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57312] Another function of GAM7957 is therefore inhibition of

LOC339146 (Accession XP_294825.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339146.

[57313] LOC339152 (Accession XP_294829.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC339152 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339152, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339152 BINDING SITE, designated SEQ ID:4314, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57314] Another function of GAM7957 is therefore inhibition of LOC339152 (Accession XP_294829.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339152.

[57315] LOC339184 (Accession XP_290743.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC339184 BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by LOC339184, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339184 BINDING SITE, designated SEQ ID:14392, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57316] Another function of GAM7957 is therefore inhibition of LOC339184 (Accession XP_290743.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339184.

[57317] LOC339199 (Accession XP_290759.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC339199 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339199, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339199 BINDING SITE, designated SEQ ID:15984, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also design-

nated SEQ ID:297.

[57318] Another function of GAM7957 is therefore inhibition of LOC339199 (Accession XP_290759.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339199.

[57319] LOC339216 (Accession XP_290762.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC339216 BINDING SITE1 and LOC339216 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC339216, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339216 BINDING SITE1 and LOC339216 BINDING SITE2, designated SEQ ID:8019 and SEQ ID:13155 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57320] Another function of GAM7957 is therefore inhibition of LOC339216 (Accession XP_290762.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339216.

[57321] LOC339223 (Accession XP_290774.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC339223 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339223, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339223 BINDING SITE, designated SEQ ID:13438, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57322] Another function of GAM7957 is therefore inhibition of LOC339223 (Accession XP_290774.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339223.

[57323] LOC339231 (Accession XP_290777.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC339231 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339231, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC339231 BINDING SITE, designated SEQ ID:18686, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57324] Another function of GAM7957 is therefore inhibition of LOC339231 (Accession XP_290777.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339231.

[57325] LOC339238 (Accession XP_290784.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC339238 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by LOC339238, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339238 BINDING SITE, designated SEQ ID:18140, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57326] Another function of GAM7957 is therefore inhibition of LOC339238 (Accession XP_290784.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC339238.

[57327] LOC339238 (Accession XP_290783.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC339238 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by LOC339238, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339238 BINDING SITE, designated SEQ ID:18140, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57328] Another function of GAM7957 is therefore inhibition of LOC339238 (Accession XP_290783.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339238.

[57329] LOC339282 (Accession XP_294900.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC339282 BINDING SITE1 and LOC339282 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC339282, corresponding to

target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339282 BINDING SITE1 and LOC339282 BINDING SITE2, designated SEQ ID:8019 and SEQ ID:13155 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57330] Another function of GAM7957 is therefore inhibition of LOC339282 (Accession XP_294900.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339282.

[57331] LOC339290 (Accession XP_294901.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC339290 BINDING SITE1 and LOC339290 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC339290, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339290 BINDING SITE1 and LOC339290 BINDING SITE2, designated SEQ ID:1493 and SEQ ID:16582 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated

GAM RNA, also designated SEQ ID:297.

[57332] Another function of GAM7957 is therefore inhibition of LOC339290 (Accession XP_294901.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339290.

[57333] LOC339327 (Accession XP_290819.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC339327 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339327, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339327 BINDING SITE, designated SEQ ID:1686, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57334] Another function of GAM7957 is therefore inhibition of LOC339327 (Accession XP_290819.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339327.

[57335] LOC339343 (Accession XP_290846.1) is another

GAM7957 target gene, herein designated TARGET GENE. LOC339343 BINDING SITE1 and LOC339343 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC339343, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339343 BINDING SITE1 and LOC339343 BINDING SITE2, designated SEQ ID:19994 and SEQ ID:5830 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57336] Another function of GAM7957 is therefore inhibition of LOC339343 (Accession XP_290846.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339343.

[57337] LOC339373 (Accession XP_294921.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC339373 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339373, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC339373 BINDING SITE, designated SEQ ID:4402, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57338] Another function of GAM7957 is therefore inhibition of LOC339373 (Accession XP_294921.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339373.

[57339] LOC339401 (Accession XP_294932.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC339401 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC339401, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339401 BINDING SITE, designated SEQ ID:14129, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57340] Another function of GAM7957 is therefore inhibition of LOC339401 (Accession XP_294932.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC339401.

[57341] LOC339417 (Accession XP_294944.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC339417 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC339417, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339417 BINDING SITE, designated SEQ ID:14425, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57342] Another function of GAM7957 is therefore inhibition of LOC339417 (Accession XP_294944.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339417.

[57343] LOC339439 (Accession XP_294952.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC339439 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339439, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339439 BINDING SITE, designated SEQ ID:12654, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57344] Another function of GAM7957 is therefore inhibition of LOC339439 (Accession XP_294952.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339439.

[57345] LOC339452 (Accession XP_290903.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC339452 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339452, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339452 BINDING SITE, designated SEQ ID:15409, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57346] Another function of GAM7957 is therefore inhibition of

LOC339452 (Accession XP_290903.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339452.

[57347] LOC339459 (Accession XP_290907.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC339459 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339459, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339459 BINDING SITE, designated SEQ ID:18690, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57348] Another function of GAM7957 is therefore inhibition of LOC339459 (Accession XP_290907.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339459.

[57349] LOC339462 (Accession XP_294966.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC339462 BINDING SITE is a target binding site found in

the 5' untranslated region of mRNA encoded by LOC339462, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339462 BINDING SITE, designated SEQ ID:6550, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57350] Another function of GAM7957 is therefore inhibition of LOC339462 (Accession XP_294966.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339462.

[57351] LOC339492 (Accession XP_290919.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC339492 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339492, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339492 BINDING SITE, designated SEQ ID:6390, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also design-

nated SEQ ID:297.

[57352] Another function of GAM7957 is therefore inhibition of LOC339492 (Accession XP_290919.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339492.

[57353] LOC339493 (Accession XP_290927.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC339493 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339493, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339493 BINDING SITE, designated SEQ ID:17699, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57354] Another function of GAM7957 is therefore inhibition of LOC339493 (Accession XP_290927.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339493.

[57355] LOC339494 (Accession XP_290925.1) is another

GAM7957 target gene, herein designated TARGET GENE. LOC339494 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339494, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339494 BINDING SITE, designated SEQ ID:13092, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57356] Another function of GAM7957 is therefore inhibition of LOC339494 (Accession XP_290925.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339494.

[57357] LOC339559 (Accession XP_290953.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC339559 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC339559, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339559 BINDING SITE, design-

nated SEQ ID:4458, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57358] Another function of GAM7957 is therefore inhibition of LOC339559 (Accession XP_290953.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339559.

[57359] LOC339587 (Accession XP_290957.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC339587 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339587, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339587 BINDING SITE, designated SEQ ID:15343, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57360] Another function of GAM7957 is therefore inhibition of LOC339587 (Accession XP_290957.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC339587.

[57361] LOC339740 (Accession XP_290339.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC339740 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339740, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339740 BINDING SITE, designated SEQ ID:10720, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57362] Another function of GAM7957 is therefore inhibition of LOC339740 (Accession XP_290339.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339740.

[57363] LOC339761 (Accession XP_291005.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC339761 BINDING SITE1 through LOC339761 BINDING SITE4 are target binding sites found in untranslated regions of mRNA encoded by LOC339761, corresponding to target binding sites such as BINDING SITE I, BINDING SITE

II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339761 BINDING SITE1 through LOC339761 BINDING SITE4, designated SEQ ID:4154, SEQ ID:12437, SEQ ID:17629 and SEQ ID:18770 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57364] Another function of GAM7957 is therefore inhibition of LOC339761 (Accession XP_291005.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339761.

[57365] LOC339803 (Accession XP_295072.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC339803 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339803, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339803 BINDING SITE, designated SEQ ID:16895, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57366] Another function of GAM7957 is therefore inhibition of LOC339803 (Accession XP_295072.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339803.

[57367] LOC339808 (Accession XP_295071.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC339808 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339808, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339808 BINDING SITE, designated SEQ ID:15343, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57368] Another function of GAM7957 is therefore inhibition of LOC339808 (Accession XP_295071.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339808.

[57369] LOC339809 (Accession XP_291020.1) is another GAM7957 target gene, herein designated TARGET GENE.

LOC339809 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC339809, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339809 BINDING SITE, designated SEQ ID:13277, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57370] Another function of GAM7957 is therefore inhibition of LOC339809 (Accession XP_291020.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339809.

[57371] LOC339831 (Accession XP_295080.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC339831 BINDING SITE1 and LOC339831 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC339831, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339831 BINDING SITE1 and LOC339831 BINDING SITE2, design-

nated SEQ ID:13584 and SEQ ID:11987 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57372] Another function of GAM7957 is therefore inhibition of LOC339831 (Accession XP_295080.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339831.

[57373] LOC339832 (Accession XP_295079.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC339832 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC339832, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339832 BINDING SITE, designated SEQ ID:1325, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57374] Another function of GAM7957 is therefore inhibition of LOC339832 (Accession XP_295079.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC339832.

[57375] LOC339835 (Accession XP_291032.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC339835 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC339835, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339835 BINDING SITE, designated SEQ ID:17278, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57376] Another function of GAM7957 is therefore inhibition of LOC339835 (Accession XP_291032.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339835.

[57377] LOC339841 (Accession XP_291038.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC339841 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339841, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339841 BINDING SITE, designated SEQ ID:13065, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57378] Another function of GAM7957 is therefore inhibition of LOC339841 (Accession XP_291038.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339841.

[57379] LOC339852 (Accession XP_295086.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC339852 BINDING SITE1 and LOC339852 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC339852, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339852 BINDING SITE1 and LOC339852 BINDING SITE2, designated SEQ ID:15089 and SEQ ID:1816 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57380] Another function of GAM7957 is therefore inhibition of

LOC339852 (Accession XP_295086.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339852.

[57381] LOC339855 (Accession XP_291041.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC339855 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339855, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339855 BINDING SITE, designated SEQ ID:5805, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57382] Another function of GAM7957 is therefore inhibition of LOC339855 (Accession XP_291041.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339855.

[57383] LOC339865 (Accession XP_295089.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC339865 BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by LOC339865, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339865 BINDING SITE, designated SEQ ID:9765, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57384] Another function of GAM7957 is therefore inhibition of LOC339865 (Accession XP_295089.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339865.

[57385] LOC339887 (Accession XP_295094.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC339887 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339887, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339887 BINDING SITE, designated SEQ ID:13689, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also design-

nated SEQ ID:297.

[57386] Another function of GAM7957 is therefore inhibition of LOC339887 (Accession XP_295094.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339887.

[57387] LOC339929 (Accession XP_295105.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC339929 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339929, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339929 BINDING SITE, designated SEQ ID:5256, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57388] Another function of GAM7957 is therefore inhibition of LOC339929 (Accession XP_295105.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339929.

[57389] LOC340038 (Accession XP_291125.2) is another

GAM7957 target gene, herein designated TARGET GENE. LOC340038 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC340038, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340038 BINDING SITE, designated SEQ ID:9766, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57390] Another function of GAM7957 is therefore inhibition of LOC340038 (Accession XP_291125.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340038.

[57391] LOC340085 (Accession XP_295152.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC340085 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC340085, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340085 BINDING SITE, design-

nated SEQ ID:11266, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57392] Another function of GAM7957 is therefore inhibition of LOC340085 (Accession XP_295152.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340085.

[57393] LOC340087 (Accession XP_295153.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC340087 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC340087, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340087 BINDING SITE, designated SEQ ID:3445, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57394] Another function of GAM7957 is therefore inhibition of LOC340087 (Accession XP_295153.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC340087.

[57395] LOC340128 (Accession XP_295164.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC340128 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC340128, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340128 BINDING SITE, designated SEQ ID:12654, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57396] Another function of GAM7957 is therefore inhibition of LOC340128 (Accession XP_295164.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340128.

[57397] LOC340133 (Accession XP_291151.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC340133 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC340133, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340133 BINDING SITE, designated SEQ ID:12306, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57398] Another function of GAM7957 is therefore inhibition of LOC340133 (Accession XP_291151.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340133.

[57399] LOC340138 (Accession XP_291153.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC340138 BINDING SITE1 through LOC340138 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC340138, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340138 BINDING SITE1 through LOC340138 BINDING SITE3, designated SEQ ID:15675, SEQ ID:10571 and SEQ ID:13155 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57400] Another function of GAM7957 is therefore inhibition of LOC340138 (Accession XP_291153.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340138.

[57401] LOC340153 (Accession XP_295176.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC340153 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC340153, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340153 BINDING SITE, designated SEQ ID:12654, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57402] Another function of GAM7957 is therefore inhibition of LOC340153 (Accession XP_295176.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340153.

[57403] LOC340184 (Accession XP_295183.1) is another GAM7957 target gene, herein designated TARGET GENE.

LOC340184 BINDING SITE1 and LOC340184 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC340184, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340184 BINDING SITE1 and LOC340184 BINDING SITE2, designated SEQ ID:19035 and SEQ ID:8198 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57404] Another function of GAM7957 is therefore inhibition of LOC340184 (Accession XP_295183.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340184.

[57405] LOC340208 (Accession XP_295187.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC340208 BINDING SITE1 through LOC340208 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC340208, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340208

BINDING SITE1 through LOC340208 BINDING SITE3, designated SEQ ID:15108, SEQ ID:9994 and SEQ ID:14091 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57406] Another function of GAM7957 is therefore inhibition of LOC340208 (Accession XP_295187.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340208.

[57407] LOC340319 (Accession XP_295216.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC340319 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC340319, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340319 BINDING SITE, designated SEQ ID:3560, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57408] Another function of GAM7957 is therefore inhibition of LOC340319 (Accession XP_295216.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC340319.

[57409] LOC340321 (Accession XP_295212.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC340321 BINDING SITE1 and LOC340321 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC340321, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340321 BINDING SITE1 and LOC340321 BINDING SITE2, designated SEQ ID:13857 and SEQ ID:8552 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57410] Another function of GAM7957 is therefore inhibition of LOC340321 (Accession XP_295212.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340321.

[57411] LOC340324 (Accession XP_290402.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC340324 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by

LOC340324, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340324 BINDING SITE, designated SEQ ID:9208, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57412] Another function of GAM7957 is therefore inhibition of LOC340324 (Accession XP_290402.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340324.

[57413] LOC340335 (Accession XP_295218.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC340335 BINDING SITE1 and LOC340335 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC340335, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340335 BINDING SITE1 and LOC340335 BINDING SITE2, designated SEQ ID:9767 and SEQ ID:12218 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated

GAM RNA, also designated SEQ ID:297.

[57414] Another function of GAM7957 is therefore inhibition of LOC340335 (Accession XP_295218.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340335.

[57415] LOC340353 (Accession XP_295221.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC340353 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC340353, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340353 BINDING SITE, designated SEQ ID:3934, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57416] Another function of GAM7957 is therefore inhibition of LOC340353 (Accession XP_295221.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340353.

[57417] LOC340362 (Accession XP_295225.1) is another

GAM7957 target gene, herein designated TARGET GENE. LOC340362 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC340362, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340362 BINDING SITE, designated SEQ ID:15223, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57418] Another function of GAM7957 is therefore inhibition of LOC340362 (Accession XP_295225.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340362.

[57419] LOC340390 (Accession XP_291269.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC340390 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC340390, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340390 BINDING SITE, design-

nated SEQ ID:15468, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57420] Another function of GAM7957 is therefore inhibition of LOC340390 (Accession XP_291269.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340390.

[57421] LOC340394 (Accession XP_295235.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC340394 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC340394, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340394 BINDING SITE, designated SEQ ID:12796, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57422] Another function of GAM7957 is therefore inhibition of LOC340394 (Accession XP_295235.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC340394.

[57423] LOC340408 (Accession XP_291274.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC340408 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC340408, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340408 BINDING SITE, designated SEQ ID:925, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57424] Another function of GAM7957 is therefore inhibition of LOC340408 (Accession XP_291274.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340408.

[57425] LOC340414 (Accession XP_295240.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC340414 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC340414, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340414 BINDING SITE, designated SEQ ID:4087, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57426] Another function of GAM7957 is therefore inhibition of LOC340414 (Accession XP_295240.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340414.

[57427] LOC340456 (Accession XP_291298.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC340456 BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by LOC340456, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340456 BINDING SITE, designated SEQ ID:19885, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57428] Another function of GAM7957 is therefore inhibition of LOC340456 (Accession XP_291298.1) . Accordingly, utili-

ties of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340456.

[57429] LOC340494 (Accession XP_290428.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC340494 BINDING SITE1 and LOC340494 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC340494, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340494 BINDING SITE1 and LOC340494 BINDING SITE2, designated SEQ ID:7183 and SEQ ID:10536 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57430] Another function of GAM7957 is therefore inhibition of LOC340494 (Accession XP_290428.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340494.

[57431] LOC340547 (Accession XP_291331.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC340547 BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by LOC340547, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340547 BINDING SITE, designated SEQ ID:15984, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57432] Another function of GAM7957 is therefore inhibition of LOC340547 (Accession XP_291331.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340547.

[57433] LOC340615 (Accession XP_294645.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC340615 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC340615, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340615 BINDING SITE, designated SEQ ID:1950, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also design-

nated SEQ ID:297.

[57434] Another function of GAM7957 is therefore inhibition of LOC340615 (Accession XP_294645.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340615.

[57435] LOC343788 (Accession XP_297855.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC343788 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC343788, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC343788 BINDING SITE, designated SEQ ID:3216, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57436] Another function of GAM7957 is therefore inhibition of LOC343788 (Accession XP_297855.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC343788.

[57437] LOC346110 (Accession XP_299316.1) is another

GAM7957 target gene, herein designated TARGET GENE. LOC346110 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC346110, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC346110 BINDING SITE, designated SEQ ID:5901, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57438] Another function of GAM7957 is therefore inhibition of LOC346110 (Accession XP_299316.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC346110.

[57439] LOC347758 (Accession XP_300253.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC347758 BINDING SITE1 and LOC347758 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC347758, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC347758

BINDING SITE1 and LOC347758 BINDING SITE2, designated SEQ ID:8739 and SEQ ID:12606 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57440] Another function of GAM7957 is therefore inhibition of LOC347758 (Accession XP_300253.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC347758.

[57441] LOC347759 (Accession XP_084325.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC347759 BINDING SITE1 and LOC347759 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC347759, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC347759 BINDING SITE1 and LOC347759 BINDING SITE2, designated SEQ ID:12061 and SEQ ID:14817 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57442] Another function of GAM7957 is therefore inhibition of LOC347759 (Accession XP_084325.1) . Accordingly, utili-

ties of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC347759.

[57443] LOC347971 (Accession XP_302639.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC347971 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC347971, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC347971 BINDING SITE, designated SEQ ID:1911, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57444] Another function of GAM7957 is therefore inhibition of LOC347971 (Accession XP_302639.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC347971.

[57445] LOC348071 (Accession XP_300620.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC348071 BINDING SITE1 and LOC348071 BINDING SITE2 are target binding sites found in untranslated re-

gions of mRNA encoded by LOC348071, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348071 BINDING SITE1 and LOC348071 BINDING SITE2, designated SEQ ID:2678 and SEQ ID:15592 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57446] Another function of GAM7957 is therefore inhibition of LOC348071 (Accession XP_300620.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348071.

[57447] LOC348072 (Accession XP_302652.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC348072 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC348072, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348072 BINDING SITE, designated SEQ ID:17403, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also design-

nated SEQ ID:297.

[57448] Another function of GAM7957 is therefore inhibition of LOC348072 (Accession XP_302652.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348072.

[57449] LOC348102 (Accession XP_302651.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC348102 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC348102, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348102 BINDING SITE, designated SEQ ID:13342, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57450] Another function of GAM7957 is therefore inhibition of LOC348102 (Accession XP_302651.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348102.

[57451] LOC348113 (Accession XP_300623.1) is another

GAM7957 target gene, herein designated TARGET GENE. LOC348113 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC348113, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348113 BINDING SITE, designated SEQ ID:10439, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57452] Another function of GAM7957 is therefore inhibition of LOC348113 (Accession XP_300623.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348113.

[57453] LOC348125 (Accession XP_302665.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC348125 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC348125, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348125 BINDING SITE, design-

nated SEQ ID:6043, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57454] Another function of GAM7957 is therefore inhibition of LOC348125 (Accession XP_302665.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348125.

[57455] LOC348137 (Accession XP_300635.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC348137 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC348137, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348137 BINDING SITE, designated SEQ ID:10439, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57456] Another function of GAM7957 is therefore inhibition of LOC348137 (Accession XP_300635.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC348137.

[57457] LOC348142 (Accession XP_300636.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC348142 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC348142, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348142 BINDING SITE, designated SEQ ID:10439, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57458] Another function of GAM7957 is therefore inhibition of LOC348142 (Accession XP_300636.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348142.

[57459] LOC348161 (Accession XP_208864.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC348161 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC348161, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348161 BINDING SITE, designated SEQ ID:3778, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57460] Another function of GAM7957 is therefore inhibition of LOC348161 (Accession XP_208864.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348161.

[57461] LOC348162 (Accession XP_300643.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC348162 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC348162, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348162 BINDING SITE, designated SEQ ID:16944, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57462] Another function of GAM7957 is therefore inhibition of LOC348162 (Accession XP_300643.1) . Accordingly, utili-

ties of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348162.

[57463] LOC348233 (Accession XP_302697.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC348233 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC348233, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348233 BINDING SITE, designated SEQ ID:7332, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57464] Another function of GAM7957 is therefore inhibition of LOC348233 (Accession XP_302697.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348233.

[57465] LOC348245 (Accession XP_209014.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC348245 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by

LOC348245, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348245 BINDING SITE, designated SEQ ID:10439, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57466] Another function of GAM7957 is therefore inhibition of LOC348245 (Accession XP_209014.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348245.

[57467] LOC348261 (Accession XP_302704.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC348261 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC348261, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348261 BINDING SITE, designated SEQ ID:11153, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57468] Another function of GAM7957 is therefore inhibition of LOC348261 (Accession XP_302704.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348261.

[57469] LOC348264 (Accession XP_302706.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC348264 BINDING SITE1 through LOC348264 BINDING SITE4 are target binding sites found in untranslated regions of mRNA encoded by LOC348264, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348264 BINDING SITE1 through LOC348264 BINDING SITE4, designated SEQ ID:9499, SEQ ID:6470, SEQ ID:825 and SEQ ID:1479 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57470] Another function of GAM7957 is therefore inhibition of LOC348264 (Accession XP_302706.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348264.

[57471] LOC348265 (Accession XP_302705.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC348265 BINDING SITE1 through LOC348265 BINDING SITE4 are target binding sites found in untranslated regions of mRNA encoded by LOC348265, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348265 BINDING SITE1 through LOC348265 BINDING SITE4, designated SEQ ID:1479, SEQ ID:6470, SEQ ID:825 and SEQ ID:9499 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57472] Another function of GAM7957 is therefore inhibition of LOC348265 (Accession XP_302705.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348265.

[57473] LOC348369 (Accession XP_302732.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC348369 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC348369, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348369 BINDING SITE, designated SEQ ID:19588, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57474] Another function of GAM7957 is therefore inhibition of LOC348369 (Accession XP_302732.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348369.

[57475] LOC348378 (Accession XP_300723.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC348378 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC348378, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348378 BINDING SITE, designated SEQ ID:9275, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57476] Another function of GAM7957 is therefore inhibition of

LOC348378 (Accession XP_300723.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348378.

[57477] LOC348393 (Accession XP_302741.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC348393 BINDING SITE1 and LOC348393 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC348393, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348393 BINDING SITE1 and LOC348393 BINDING SITE2, designated SEQ ID:15307 and SEQ ID:15224 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57478] Another function of GAM7957 is therefore inhibition of LOC348393 (Accession XP_302741.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348393.

[57479] LOC348402 (Accession XP_300730.1) is another GAM7957 target gene, herein designated TARGET GENE.

LOC348402 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC348402, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348402 BINDING SITE, designated SEQ ID:6390, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57480] Another function of GAM7957 is therefore inhibition of LOC348402 (Accession XP_300730.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348402.

[57481] LOC348442 (Accession XP_057659.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC348442 BINDING SITE1 and LOC348442 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC348442, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348442 BINDING SITE1 and LOC348442 BINDING SITE2, design-

nated SEQ ID:12210 and SEQ ID:1671 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57482] Another function of GAM7957 is therefore inhibition of LOC348442 (Accession XP_057659.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348442.

[57483] LOC348455 (Accession XP_302760.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC348455 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC348455, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348455 BINDING SITE, designated SEQ ID:18285, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57484] Another function of GAM7957 is therefore inhibition of LOC348455 (Accession XP_302760.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC348455.

[57485] LOC348456 (Accession XP_302761.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC348456 BINDING SITE1 and LOC348456 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC348456, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348456 BINDING SITE1 and LOC348456 BINDING SITE2, designated SEQ ID:12336 and SEQ ID:2031 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57486] Another function of GAM7957 is therefore inhibition of LOC348456 (Accession XP_302761.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348456.

[57487] LOC348461 (Accession XP_302764.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC348461 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC348461, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348461 BINDING SITE, designated SEQ ID:7449, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57488] Another function of GAM7957 is therefore inhibition of LOC348461 (Accession XP_302764.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348461.

[57489] LOC348474 (Accession XP_209299.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC348474 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC348474, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348474 BINDING SITE, designated SEQ ID:4185, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57490] Another function of GAM7957 is therefore inhibition of

LOC348474 (Accession XP_209299.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348474.

[57491] LOC348475 (Accession XP_300748.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC348475 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC348475, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348475 BINDING SITE, designated SEQ ID:5613, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57492] Another function of GAM7957 is therefore inhibition of LOC348475 (Accession XP_300748.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348475.

[57493] LOC348480 (Accession XP_302773.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC348480 BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by LOC348480, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348480 BINDING SITE, designated SEQ ID:5321, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57494] Another function of GAM7957 is therefore inhibition of LOC348480 (Accession XP_302773.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348480.

[57495] LOC348482 (Accession XP_300753.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC348482 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC348482, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348482 BINDING SITE, designated SEQ ID:5613, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also design-

nated SEQ ID:297.

[57496] Another function of GAM7957 is therefore inhibition of LOC348482 (Accession XP_300753.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348482.

[57497] LOC348488 (Accession XP_300352.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC348488 BINDING SITE1 and LOC348488 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC348488, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348488 BINDING SITE1 and LOC348488 BINDING SITE2, designated SEQ ID:19709 and SEQ ID:3203 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57498] Another function of GAM7957 is therefore inhibition of LOC348488 (Accession XP_300352.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348488.

[57499] LOC348496 (Accession XP_302795.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC348496 BINDING SITE1 and LOC348496 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC348496, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348496 BINDING SITE1 and LOC348496 BINDING SITE2, designated SEQ ID:5830 and SEQ ID:7670 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57500] Another function of GAM7957 is therefore inhibition of LOC348496 (Accession XP_302795.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348496.

[57501] LOC348503 (Accession XP_300762.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC348503 BINDING SITE1 and LOC348503 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC348503, corresponding to target binding sites such as BINDING SITE I, BINDING SITE

II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348503 BINDING SITE1 and LOC348503 BINDING SITE2, designated SEQ ID:13988 and SEQ ID:9335 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57502] Another function of GAM7957 is therefore inhibition of LOC348503 (Accession XP_300762.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348503.

[57503] LOC348504 (Accession XP_300769.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC348504 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC348504, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348504 BINDING SITE, designated SEQ ID:17081, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57504] Another function of GAM7957 is therefore inhibition of

LOC348504 (Accession XP_300769.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348504.

[57505] LOC348520 (Accession XP_300772.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC348520 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC348520, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348520 BINDING SITE, designated SEQ ID:6989, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57506] Another function of GAM7957 is therefore inhibition of LOC348520 (Accession XP_300772.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348520.

[57507] LOC348522 (Accession XP_300774.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC348522 BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by LOC348522, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348522 BINDING SITE, designated SEQ ID:15409, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57508] Another function of GAM7957 is therefore inhibition of LOC348522 (Accession XP_300774.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348522.

[57509] LOC348527 (Accession XP_300779.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC348527 BINDING SITE1 through LOC348527 BINDING SITE4 are target binding sites found in untranslated regions of mRNA encoded by LOC348527, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348527 BINDING SITE1 through LOC348527 BINDING SITE4, designated SEQ ID:12336, SEQ ID:2031, SEQ ID:3911 and SEQ

ID:18885 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57510] Another function of GAM7957 is therefore inhibition of LOC348527 (Accession XP_300779.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348527.

[57511] LOC348532 (Accession XP_302818.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC348532 BINDING SITE1 and LOC348532 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC348532, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348532 BINDING SITE1 and LOC348532 BINDING SITE2, designated SEQ ID:15307 and SEQ ID:15224 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57512] Another function of GAM7957 is therefore inhibition of LOC348532 (Accession XP_302818.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC348532.

[57513] LOC348533 (Accession XP_302819.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC348533 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC348533, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348533 BINDING SITE, designated SEQ ID:12654, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57514] Another function of GAM7957 is therefore inhibition of LOC348533 (Accession XP_302819.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348533.

[57515] LOC348541 (Accession XP_302820.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC348541 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC348541, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348541 BINDING SITE, designated SEQ ID:13091, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57516] Another function of GAM7957 is therefore inhibition of LOC348541 (Accession XP_302820.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348541.

[57517] LOC348544 (Accession XP_300243.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC348544 BINDING SITE1 through LOC348544 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC348544, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348544 BINDING SITE1 through LOC348544 BINDING SITE3, designated SEQ ID:16953, SEQ ID:5164 and SEQ ID:1492 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57518] Another function of GAM7957 is therefore inhibition of LOC348544 (Accession XP_300243.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348544.

[57519] LOC348594 (Accession XP_302834.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC348594 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC348594, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348594 BINDING SITE, designated SEQ ID:16401, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57520] Another function of GAM7957 is therefore inhibition of LOC348594 (Accession XP_302834.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348594.

[57521] LOC348595 (Accession XP_302837.1) is another GAM7957 target gene, herein designated TARGET GENE.

LOC348595 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC348595, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348595 BINDING SITE, designated SEQ ID:16401, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57522] Another function of GAM7957 is therefore inhibition of LOC348595 (Accession XP_302837.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348595.

[57523] LOC348603 (Accession XP_302844.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC348603 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC348603, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348603 BINDING SITE, designated SEQ ID:16401, to the nucleotide sequence of

GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57524] Another function of GAM7957 is therefore inhibition of LOC348603 (Accession XP_302844.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348603.

[57525] LOC348605 (Accession XP_300793.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC348605 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC348605, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348605 BINDING SITE, designated SEQ ID:16401, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57526] Another function of GAM7957 is therefore inhibition of LOC348605 (Accession XP_300793.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348605.

[57527] LOC348629 (Accession XP_209400.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC348629 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC348629, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348629 BINDING SITE, designated SEQ ID:14111, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57528] Another function of GAM7957 is therefore inhibition of LOC348629 (Accession XP_209400.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348629.

[57529] LOC348699 (Accession XP_300816.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC348699 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC348699, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC348699 BINDING SITE, designated SEQ ID:15983, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57530] Another function of GAM7957 is therefore inhibition of LOC348699 (Accession XP_300816.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348699.

[57531] LOC348738 (Accession XP_300826.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC348738 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC348738, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348738 BINDING SITE, designated SEQ ID:7320, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57532] Another function of GAM7957 is therefore inhibition of LOC348738 (Accession XP_300826.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC348738.

[57533] LOC348790 (Accession XP_300843.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC348790 BINDING SITE1 and LOC348790 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC348790, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348790 BINDING SITE1 and LOC348790 BINDING SITE2, designated SEQ ID:10423 and SEQ ID:16164 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57534] Another function of GAM7957 is therefore inhibition of LOC348790 (Accession XP_300843.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348790.

[57535] LOC348835 (Accession XP_302902.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC348835 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by

LOC348835, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348835 BINDING SITE, designated SEQ ID:18336, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57536] Another function of GAM7957 is therefore inhibition of LOC348835 (Accession XP_302902.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348835.

[57537] LOC348843 (Accession XP_302903.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC348843 BINDING SITE1 and LOC348843 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC348843, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348843 BINDING SITE1 and LOC348843 BINDING SITE2, designated SEQ ID:19499 and SEQ ID:17081 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated

GAM RNA, also designated SEQ ID:297.

[57538] Another function of GAM7957 is therefore inhibition of LOC348843 (Accession XP_302903.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348843.

[57539] LOC348899 (Accession XP_302914.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC348899 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC348899, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348899 BINDING SITE, designated SEQ ID:8189, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57540] Another function of GAM7957 is therefore inhibition of LOC348899 (Accession XP_302914.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348899.

[57541] LOC349050 (Accession XP_300917.1) is another

GAM7957 target gene, herein designated TARGET GENE. LOC349050 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC349050, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349050 BINDING SITE, designated SEQ ID:15984, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57542] Another function of GAM7957 is therefore inhibition of LOC349050 (Accession XP_300917.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349050.

[57543] LOC349063 (Accession XP_302949.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC349063 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC349063, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349063 BINDING SITE, design-

nated SEQ ID:14367, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57544] Another function of GAM7957 is therefore inhibition of LOC349063 (Accession XP_302949.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349063.

[57545] LOC349096 (Accession XP_300937.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC349096 BINDING SITE1 and LOC349096 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC349096, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349096 BINDING SITE1 and LOC349096 BINDING SITE2, designated SEQ ID:7908 and SEQ ID:2306 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57546] Another function of GAM7957 is therefore inhibition of LOC349096 (Accession XP_300937.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC349096.

[57547] LOC349151 (Accession XP_302967.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC349151 BINDING SITE1 and LOC349151 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC349151, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349151 BINDING SITE1 and LOC349151 BINDING SITE2, designated SEQ ID:9421 and SEQ ID:12920 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57548] Another function of GAM7957 is therefore inhibition of LOC349151 (Accession XP_302967.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349151.

[57549] LOC349169 (Accession XP_302978.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC349169 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by

LOC349169, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349169 BINDING SITE, designated SEQ ID:10438, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57550] Another function of GAM7957 is therefore inhibition of LOC349169 (Accession XP_302978.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349169.

[57551] LOC349170 (Accession XP_300969.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC349170 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC349170, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349170 BINDING SITE, designated SEQ ID:4313, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57552] Another function of GAM7957 is therefore inhibition of LOC349170 (Accession XP_300969.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349170.

[57553] LOC349186 (Accession XP_302985.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC349186 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC349186, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349186 BINDING SITE, designated SEQ ID:10440, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57554] Another function of GAM7957 is therefore inhibition of LOC349186 (Accession XP_302985.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349186.

[57555] LOC349197 (Accession XP_300974.1) is another GAM7957 target gene, herein designated TARGET GENE.

LOC349197 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC349197, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349197 BINDING SITE, designated SEQ ID:18689, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57556] Another function of GAM7957 is therefore inhibition of LOC349197 (Accession XP_300974.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349197.

[57557] LOC349276 (Accession XP_301005.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC349276 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC349276, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349276 BINDING SITE, designated SEQ ID:3491, to the nucleotide sequence of

GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57558] Another function of GAM7957 is therefore inhibition of LOC349276 (Accession XP_301005.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349276.

[57559] LOC349282 (Accession XP_301008.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC349282 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC349282, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349282 BINDING SITE, designated SEQ ID:17262, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57560] Another function of GAM7957 is therefore inhibition of LOC349282 (Accession XP_301008.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349282.

[57561] LOC349298 (Accession XP_301016.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC349298 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC349298, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349298 BINDING SITE, designated SEQ ID:1755, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57562] Another function of GAM7957 is therefore inhibition of LOC349298 (Accession XP_301016.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349298.

[57563] LOC349313 (Accession XP_301024.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC349313 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC349313, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC349313 BINDING SITE, designated SEQ ID:17262, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57564] Another function of GAM7957 is therefore inhibition of LOC349313 (Accession XP_301024.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349313.

[57565] LOC349332 (Accession XP_301033.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC349332 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC349332, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349332 BINDING SITE, designated SEQ ID:10438, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57566] Another function of GAM7957 is therefore inhibition of LOC349332 (Accession XP_301033.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC349332.

[57567] LOC349381 (Accession XP_303039.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC349381 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC349381, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349381 BINDING SITE, designated SEQ ID:11100, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57568] Another function of GAM7957 is therefore inhibition of LOC349381 (Accession XP_303039.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349381.

[57569] LOC349420 (Accession XP_301075.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC349420 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC349420, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349420 BINDING SITE, designated SEQ ID:18825, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57570] Another function of GAM7957 is therefore inhibition of LOC349420 (Accession XP_301075.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349420.

[57571] LOC349430 (Accession XP_301084.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC349430 BINDING SITE1 through LOC349430 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by LOC349430, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349430 BINDING SITE1 through LOC349430 BINDING SITE3, designated SEQ ID:9769, SEQ ID:13491 and SEQ ID:5210 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57572] Another function of GAM7957 is therefore inhibition of LOC349430 (Accession XP_301084.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349430.

[57573] LOC349432 (Accession XP_301086.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC349432 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC349432, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349432 BINDING SITE, designated SEQ ID:13491, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57574] Another function of GAM7957 is therefore inhibition of LOC349432 (Accession XP_301086.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349432.

[57575] LOC349447 (Accession XP_088752.1) is another GAM7957 target gene, herein designated TARGET GENE.

LOC349447 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC349447, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349447 BINDING SITE, designated SEQ ID:18709, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57576] Another function of GAM7957 is therefore inhibition of LOC349447 (Accession XP_088752.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349447.

[57577] LOC351012 (Accession XP_304617.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC351012 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC351012, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC351012 BINDING SITE, designated SEQ ID:10900, to the nucleotide sequence of

GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57578] Another function of GAM7957 is therefore inhibition of LOC351012 (Accession XP_304617.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC351012.

[57579] LOC51145 (Accession NP_057242.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC51145 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC51145, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC51145 BINDING SITE, designated SEQ ID:12025, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57580] Another function of GAM7957 is therefore inhibition of LOC51145 (Accession NP_057242.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC51145.

[57581] LOC51212 (Accession NP_057464.1) is another GAM7957

target gene, herein designated TARGET GENE. LOC51212 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC51212, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC51212 BINDING SITE, designated SEQ ID:7047, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57582] Another function of GAM7957 is therefore inhibition of LOC51212 (Accession NP_057464.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC51212.

[57583] LOC51279 (Accession NP_057630.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC51279 BINDING SITE1 and LOC51279 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC51279, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC51279 BINDING SITE1 and LOC51279 BINDING SITE2, designated SEQ ID:19061

and SEQ ID:1492 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57584] Another function of GAM7957 is therefore inhibition of LOC51279 (Accession NP_057630.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC51279.

[57585] LOC51333 (Accession NP_057727.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC51333 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC51333, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC51333 BINDING SITE, designated SEQ ID:4982, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57586] Another function of GAM7957 is therefore inhibition of LOC51333 (Accession NP_057727.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC51333.

[57587] LOC55974 (Accession NP_061333.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC55974 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC55974, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC55974 BINDING SITE, designated SEQ ID:15223, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57588] Another function of GAM7957 is therefore inhibition of LOC55974 (Accession NP_061333.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC55974.

[57589] LOC57090 (Accession NP_065088.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC57090 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC57090, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC57090 BINDING SITE, designated SEQ ID:18987, to the

nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57590] Another function of GAM7957 is therefore inhibition of LOC57090 (Accession NP_065088.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC57090.

[57591] LOC63929 (Accession NP_071381.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC63929 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC63929, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC63929 BINDING SITE, designated SEQ ID:9770, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57592] Another function of GAM7957 is therefore inhibition of LOC63929 (Accession NP_071381.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC63929.

[57593] LOC64167 (Accession NP_071745.1) is another GAM7957

target gene, herein designated TARGET GENE. LOC64167 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC64167, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC64167 BINDING SITE, designated SEQ ID:17267, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57594] Another function of GAM7957 is therefore inhibition of LOC64167 (Accession NP_071745.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC64167.

[57595] LOC81569 (Accession XP_030465.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC81569 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC81569, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC81569 BINDING SITE, designated SEQ ID:15437, to the nucleotide sequence of GAM7957 RNA, herein designated

GAM RNA, also designated SEQ ID:297.

[57596] Another function of GAM7957 is therefore inhibition of LOC81569 (Accession XP_030465.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC81569.

[57597] LOC83693 (Accession NP_113651.3) is another GAM7957 target gene, herein designated TARGET GENE. LOC83693 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC83693, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC83693 BINDING SITE, designated SEQ ID:17437, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57598] Another function of GAM7957 is therefore inhibition of LOC83693 (Accession NP_113651.3) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC83693.

[57599] LOC90120 (Accession XP_291299.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC90120

BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC90120, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC90120 BINDING SITE, designated SEQ ID:19914, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57600] Another function of GAM7957 is therefore inhibition of LOC90120 (Accession XP_291299.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC90120.

[57601] LOC90233 (Accession NP_612356.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC90233 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC90233, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC90233 BINDING SITE, designated SEQ ID:14788, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57602] Another function of GAM7957 is therefore inhibition of LOC90233 (Accession NP_612356.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC90233.

[57603] LOC90321 (Accession XP_030896.3) is another GAM7957 target gene, herein designated TARGET GENE. LOC90321 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC90321, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC90321 BINDING SITE, designated SEQ ID:2487, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57604] Another function of GAM7957 is therefore inhibition of LOC90321 (Accession XP_030896.3) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC90321.

[57605] LOC90573 (Accession XP_032669.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC90573 BINDING SITE is a target binding site found in the 3' un-

translated region of mRNA encoded by LOC90573, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC90573 BINDING SITE, designated SEQ ID:17837, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57606] Another function of GAM7957 is therefore inhibition of LOC90573 (Accession XP_032669.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC90573.

[57607] LOC90784 (Accession XP_034109.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC90784 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC90784, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC90784 BINDING SITE, designated SEQ ID:11847, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57608] Another function of GAM7957 is therefore inhibition of

LOC90784 (Accession XP_034109.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC90784.

[57609] LOC90785 (Accession XP_034110.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC90785 BINDING SITE1 and LOC90785 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC90785, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC90785 BINDING SITE1 and LOC90785 BINDING SITE2, designated SEQ ID:13437 and SEQ ID:12572 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57610] Another function of GAM7957 is therefore inhibition of LOC90785 (Accession XP_034110.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC90785.

[57611] LOC90918 (Accession XP_034863.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC90918

BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC90918, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC90918 BINDING SITE, designated SEQ ID:7710, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57612] Another function of GAM7957 is therefore inhibition of LOC90918 (Accession XP_034863.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC90918.

[57613] LOC91035 (Accession XP_035622.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC91035 BINDING SITE1 and LOC91035 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC91035, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC91035 BINDING SITE1 and LOC91035 BINDING SITE2, designated SEQ ID:16454 and SEQ ID:10462 respectively, to the nucleotide se-

quence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57614] Another function of GAM7957 is therefore inhibition of LOC91035 (Accession XP_035622.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC91035.

[57615] LOC91056 (Accession NP_612377.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC91056 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by LOC91056, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC91056 BINDING SITE, designated SEQ ID:15158, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57616] Another function of GAM7957 is therefore inhibition of LOC91056 (Accession NP_612377.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC91056.

[57617] LOC91250 (Accession XP_037135.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC91250 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC91250, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC91250 BINDING SITE, designated SEQ ID:5988, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57618] Another function of GAM7957 is therefore inhibition of LOC91250 (Accession XP_037135.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC91250.

[57619] LOC91319 (Accession XP_037686.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC91319 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC91319, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC91319 BINDING SITE, designated SEQ ID:7955, to the

nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57620] Another function of GAM7957 is therefore inhibition of LOC91319 (Accession XP_037686.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC91319.

[57621] LOC91526 (Accession NP_710181.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC91526 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC91526, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC91526 BINDING SITE, designated SEQ ID:13402, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57622] Another function of GAM7957 is therefore inhibition of LOC91526 (Accession NP_710181.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC91526.

[57623] LOC91862 (Accession NP_443090.1) is another GAM7957

target gene, herein designated TARGET GENE. LOC91862 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC91862, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC91862 BINDING SITE, designated SEQ ID:6686, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57624] Another function of GAM7957 is therefore inhibition of LOC91862 (Accession NP_443090.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC91862.

[57625] LOC92078 (Accession XP_042684.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC92078 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC92078, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC92078 BINDING SITE, designated SEQ ID:15724, to the nucleotide sequence of GAM7957 RNA, herein designated

GAM RNA, also designated SEQ ID:297.

[57626] Another function of GAM7957 is therefore inhibition of LOC92078 (Accession XP_042684.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC92078.

[57627] LOC92228 (Accession XP_043731.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC92228 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC92228, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC92228 BINDING SITE, designated SEQ ID:9420, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57628] Another function of GAM7957 is therefore inhibition of LOC92228 (Accession XP_043731.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC92228.

[57629] LOC92230 (Accession XP_043733.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC92230

BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC92230, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC92230 BINDING SITE, designated SEQ ID:15751, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57630] Another function of GAM7957 is therefore inhibition of LOC92230 (Accession XP_043733.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC92230.

[57631] LOC92235 (Accession XP_043739.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC92235 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC92235, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC92235 BINDING SITE, designated SEQ ID:1042, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57632] Another function of GAM7957 is therefore inhibition of LOC92235 (Accession XP_043739.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC92235.

[57633] LOC92299 (Accession XP_044075.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC92299 BINDING SITE1 and LOC92299 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC92299, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC92299 BINDING SITE1 and LOC92299 BINDING SITE2, designated SEQ ID:8662 and SEQ ID:15089 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57634] Another function of GAM7957 is therefore inhibition of LOC92299 (Accession XP_044075.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC92299.

[57635] LOC92312 (Accession XP_044166.4) is another GAM7957

target gene, herein designated TARGET GENE. LOC92312 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC92312, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC92312 BINDING SITE, designated SEQ ID:15597, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57636] Another function of GAM7957 is therefore inhibition of LOC92312 (Accession XP_044166.4) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC92312.

[57637] LOC92360 (Accession XP_044589.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC92360 BINDING SITE1 and LOC92360 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC92360, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC92360 BINDING SITE1 and LOC92360 BINDING SITE2, designated SEQ ID:11410

and SEQ ID:722 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57638] Another function of GAM7957 is therefore inhibition of LOC92360 (Accession XP_044589.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC92360.

[57639] LOC92405 (Accession XP_044914.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC92405 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC92405, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC92405 BINDING SITE, designated SEQ ID:12688, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57640] Another function of GAM7957 is therefore inhibition of LOC92405 (Accession XP_044914.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC92405.

[57641] LOC92482 (Accession XP_045310.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC92482 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC92482, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC92482 BINDING SITE, designated SEQ ID:15548, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57642] Another function of GAM7957 is therefore inhibition of LOC92482 (Accession XP_045310.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC92482.

[57643] LOC92499 (Accession XP_045450.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC92499 BINDING SITE1 and LOC92499 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC92499, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC92499 BINDING SITE1

and LOC92499 BINDING SITE2, designated SEQ ID:4848 and SEQ ID:5830 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57644] Another function of GAM7957 is therefore inhibition of LOC92499 (Accession XP_045450.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC92499.

[57645] LOC92659 (Accession XP_046434.3) is another GAM7957 target gene, herein designated TARGET GENE. LOC92659 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC92659, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC92659 BINDING SITE, designated SEQ ID:11153, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57646] Another function of GAM7957 is therefore inhibition of LOC92659 (Accession XP_046434.3) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC92659.

[57647] LOC92973 (Accession XP_048529.2) is another GAM7957 target gene, herein designated TARGET GENE. LOC92973 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC92973, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC92973 BINDING SITE, designated SEQ ID:12985, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57648] Another function of GAM7957 is therefore inhibition of LOC92973 (Accession XP_048529.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC92973.

[57649] LOC93132 (Accession XP_049396.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC93132 BINDING SITE1 and LOC93132 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC93132, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of

the nucleotide sequences of LOC93132 BINDING SITE1 and LOC93132 BINDING SITE2, designated SEQ ID:10438 and SEQ ID:14699 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57650] Another function of GAM7957 is therefore inhibition of LOC93132 (Accession XP_049396.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC93132.

[57651] LOC93613 (Accession XP_052568.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC93613 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC93613, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC93613 BINDING SITE, designated SEQ ID:19262, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57652] Another function of GAM7957 is therefore inhibition of LOC93613 (Accession XP_052568.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC93613.

[57653] LOC94431 (Accession NP_660280.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC94431 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC94431, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC94431 BINDING SITE, designated SEQ ID:9856, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57654] Another function of GAM7957 is therefore inhibition of LOC94431 (Accession NP_660280.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC94431.

[57655] LOC96597 (Accession XP_039922.1) is another GAM7957 target gene, herein designated TARGET GENE. LOC96597 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC96597, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of LOC96597 BINDING SITE, designated SEQ ID:17714, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57656] Another function of GAM7957 is therefore inhibition of LOC96597 (Accession XP_039922.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC96597.

[57657] LOST1 (Accession NP_758955.1) is another GAM7957 target gene, herein designated TARGET GENE. LOST1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOST1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOST1 BINDING SITE, designated SEQ ID:1927, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57658] Another function of GAM7957 is therefore inhibition of LOST1 (Accession NP_758955.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOST1.

[57659] LRG (Accession NP_443204.1) is another GAM7957 target gene, herein designated TARGET GENE. LRG BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LRG, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LRG BINDING SITE, designated SEQ ID:16201, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57660] Another function of GAM7957 is therefore inhibition of LRG (Accession NP_443204.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LRG.

[57661] Leucine-rich repeat-containing 2 (LRRC2, Accession NP_079026.2) is another GAM7957 target gene, herein designated TARGET GENE. LRRC2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by LRRC2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LRRC2 BINDING SITE, designated SEQ ID:10418, to the nu-

cleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57662] Another function of GAM7957 is therefore inhibition of Leucine-rich repeat-containing 2 (LRRC2, Accession NP_079026.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LRRC2.

[57663] Leucine-rich repeat-containing 2 (LRRC2, Accession NP_078788.1) is another GAM7957 target gene, herein designated TARGET GENE. LRRC2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by LRRC2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LRRC2 BINDING SITE, designated SEQ ID:10418, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57664] Another function of GAM7957 is therefore inhibition of Leucine-rich repeat-containing 2 (LRRC2, Accession NP_078788.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LRRC2.

[57665] Leucine rich repeat (in flil) interacting protein 1 (LRRFIP1, Accession NP_004726.1) is another GAM7957 target gene, herein designated TARGET GENE. LRRFIP1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LRRFIP1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LRRFIP1 BINDING SITE, designated SEQ ID:14509, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57666] Another function of GAM7957 is therefore inhibition of Leucine rich repeat (in flil) interacting protein 1 (LRRFIP1, Accession NP_004726.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LRRFIP1.

[57667] Leucine zipper protein 1 (LUZP1, Accession NP_361013.1) is another GAM7957 target gene, herein designated TARGET GENE. LUZP1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LUZP1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LUZP1 BINDING SITE, designated SEQ ID:9422, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57668] Another function of GAM7957 is therefore inhibition of Leucine zipper protein 1 (LUZP1, Accession NP_361013.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LUZP1.

[57669] LYNX1 (Accession NP_076435.1) is another GAM7957 target gene, herein designated TARGET GENE. LYNX1 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by LYNX1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LYNX1 BINDING SITE, designated SEQ ID:2417, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57670] Another function of GAM7957 is therefore inhibition of LYNX1 (Accession NP_076435.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of

diseases and clinical conditions associated with LYNX1.

[57671] LYNX1 (Accession NP_803252.1) is another GAM7957 target gene, herein designated TARGET GENE. LYNX1 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by LYNX1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LYNX1 BINDING SITE, designated SEQ ID:2417, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57672] Another function of GAM7957 is therefore inhibition of LYNX1 (Accession NP_803252.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LYNX1.

[57673] LZLP (Accession NP_037476.1) is another GAM7957 target gene, herein designated TARGET GENE. LZLP BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LZLP, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LZLP BINDING

SITE, designated SEQ ID:16039, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57674] Another function of GAM7957 is therefore inhibition of LZLP (Accession NP_037476.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LZLP.

[57675] Leucine zipper, putative tumor suppressor 1 (LZTS1, Accession NP_066300.1) is another GAM7957 target gene, herein designated TARGET GENE. LZTS1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LZTS1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LZTS1 BINDING SITE, designated SEQ ID:8918, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57676] Another function of GAM7957 is therefore inhibition of Leucine zipper, putative tumor suppressor 1 (LZTS1, Accession NP_066300.1), a gene which is an essential component of the nucleoskeleton. potential role in crosslinking filaments or anchoring other molecules. it is essential

for growth. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LZTS1.

[57677] The function of LZTS1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM130.1. Microtubule-actin crosslinking factor 1 (MACF1, Accession NP_149033.1) is another GAM7957 target gene, herein designated TARGET GENE. MACF1 BINDING SITE1 and MACF1 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by MACF1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MACF1 BINDING SITE1 and MACF1 BINDING SITE2, designated SEQ ID:11920 and SEQ ID:1172 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57678] Another function of GAM7957 is therefore inhibition of Microtubule-actin crosslinking factor 1 (MACF1, Accession NP_149033.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical

cal conditions associated with MACF1.

[57679] V-maf musculoaponeurotic fibrosarcoma oncogene homolog f (avian) (MAFF, Accession NP_036455.1) is another GAM7957 target gene, herein designated TARGET GENE. MAFF BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by MAFF, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MAFF BINDING SITE, designated SEQ ID:5558, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57680] Another function of GAM7957 is therefore inhibition of V-maf musculoaponeurotic fibrosarcoma oncogene homolog f (avian) (MAFF, Accession NP_036455.1), a gene which binds to the US-2 motif of the oxytocin receptor gene; has a leucine zipper structure. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MAFF.

[57681] The function of MAFF and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM200.1.V-maf musculoaponeurotic fibrosarcoma oncogene homolog f (avian) (MAFF, Accession NP_690617.1) is another GAM7957 target gene, herein designated TARGET GENE. MAFF BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by MAFF, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MAFF BINDING SITE, designated SEQ ID:5558, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57682] Another function of GAM7957 is therefore inhibition of V-maf musculoaponeurotic fibrosarcoma oncogene homolog f (avian) (MAFF, Accession NP_690617.1), a gene which Binds to the US- 2 motif of the oxytocin receptor gene; has a leucine zipper structure. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MAFF.

[57683] The function of MAFF and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM200.1.Mal, t-cell differentiation protein 2 (MAL2,

Accession NP_443118.1) is another GAM7957 target gene, herein designated TARGET GENE. MAL2 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MAL2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MAL2 BINDING SITE, designated SEQ ID:6717, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57684] Another function of GAM7957 is therefore inhibition of Mal, t-cell differentiation protein 2 (MAL2, Accession NP_443118.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MAL2.

[57685] Mitogen-activated protein kinase kinase 7 (MAP2K7, Accession NP_663302.1) is another GAM7957 target gene, herein designated TARGET GENE. MAP2K7 BINDING SITE1 and MAP2K7 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by MAP2K7, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of

the nucleotide sequences of MAP2K7 BINDING SITE1 and MAP2K7 BINDING SITE2, designated SEQ ID:19795 and SEQ ID:8514 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57686] Another function of GAM7957 is therefore inhibition of Mitogen-activated protein kinase kinase 7 (MAP2K7, Accession NP_663302.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MAP2K7.

[57687] Mitogen-activated protein kinase kinase kinase 9 (MAP3K9, Accession XP_027237.1) is another GAM7957 target gene, herein designated TARGET GENE. MAP3K9 BINDING SITE1 through MAP3K9 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by MAP3K9, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MAP3K9 BINDING SITE1 through MAP3K9 BINDING SITE3, designated SEQ ID:14786, SEQ ID:17642 and SEQ ID:9732 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57688] Another function of GAM7957 is therefore inhibition of Mitogen-activated protein kinase kinase kinase 9 (MAP3K9, Accession XP_027237.1), a gene which is a MIXED- LINEAGE KINASE 1. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MAP3K9.

[57689] The function of MAP3K9 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM347.1. Microtubule-associated protein 4 (MAP4, Accession NP_112146.1) is another GAM7957 target gene, herein designated TARGET GENE. MAP4 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by MAP4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MAP4 BINDING SITE, designated SEQ ID:16329, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57690] Another function of GAM7957 is therefore inhibition of Microtubule-associated protein 4 (MAP4, Accession NP_112146.1), a gene which is a MICROTUBULE- ASSOCI-

ATED PROTEIN. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MAP4.

[57691] The function of MAP4 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM401.1. Microtubule-associated protein 4 (MAP4, Accession NP_112245.1) is another GAM7957 target gene, herein designated TARGET GENE. MAP4 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by MAP4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MAP4 BINDING SITE, designated SEQ ID:16329, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57692] Another function of GAM7957 is therefore inhibition of Microtubule-associated protein 4 (MAP4, Accession NP_112245.1), a gene which is a MICROTUBULE- ASSOCIATED PROTEIN. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MAP4.

[57693] The function of MAP4 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM401.1. Microtubule-associated protein 4 (MAP4, Accession NP_002366.1) is another GAM7957 target gene, herein designated TARGET GENE. MAP4 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by MAP4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MAP4 BINDING SITE, designated SEQ ID:16329, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57694] Another function of GAM7957 is therefore inhibition of Microtubule-associated protein 4 (MAP4, Accession NP_002366.1), a gene which is a MICROTUBULE- ASSOCIATED PROTEIN. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MAP4.

[57695] The function of MAP4 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM401.1.Microtubule-associated protein 4 (MAP4, Accession NP_112147.1) is another GAM7957 target gene, herein designated TARGET GENE. MAP4 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by MAP4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MAP4 BINDING SITE, designated SEQ ID:16329, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57696] Another function of GAM7957 is therefore inhibition of Microtubule-associated protein 4 (MAP4, Accession NP_112147.1), a gene which is a MICROTUBULE- ASSOCIATED PROTEIN. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MAP4.

[57697] The function of MAP4 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM401.1.Mitogen-activated protein kinase 8 interacting protein 3 (MAPK8IP3, Accession NP_203750.1) is another GAM7957 target gene, herein designated TARGET

GENE. MAPK8IP3 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by MAPK8IP3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MAPK8IP3 BINDING SITE, designated SEQ ID:6843, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57698] Another function of GAM7957 is therefore inhibition of Mitogen-activated protein kinase 8 interacting protein 3 (MAPK8IP3, Accession NP_203750.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MAPK8IP3.

[57699] MAPKBP1 (Accession XP_031706.7) is another GAM7957 target gene, herein designated TARGET GENE. MAPKBP1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MAPKBP1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MAPKBP1 BINDING SITE, designated SEQ ID:8123, to the

nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57700] Another function of GAM7957 is therefore inhibition of MAPKBP1 (Accession XP_031706.7) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MAP-KBP1.

[57701] MAWBP (Accession NP_071412.1) is another GAM7957 target gene, herein designated TARGET GENE. MAWBP BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MAWBP, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MAWBP BINDING SITE, designated SEQ ID:14181, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57702] Another function of GAM7957 is therefore inhibition of MAWBP (Accession NP_071412.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MAWBP.

[57703] MBTD1 (Accession NP_060113.1) is another GAM7957 target gene, herein designated TARGET GENE. MBTD1

BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MBTD1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MBTD1 BINDING SITE, designated SEQ ID:2975, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57704] Another function of GAM7957 is therefore inhibition of MBTD1 (Accession NP_060113.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MBTD1.

[57705] Melanoma cell adhesion molecule (MCAM, Accession NP_006491.1) is another GAM7957 target gene, herein designated TARGET GENE. MCAM BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MCAM, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MCAM BINDING SITE, designated SEQ ID:3363, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57706] Another function of GAM7957 is therefore inhibition of Melanoma cell adhesion molecule (MCAM, Accession NP_006491.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MCAM.

[57707] Mcm4 minichromosome maintenance deficient 4 (*s. cerevisiae*) (MCM4, Accession XP_030274.1) is another GAM7957 target gene, herein designated TARGET GENE. MCM4 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MCM4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MCM4 BINDING SITE, designated SEQ ID:8108, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57708] Another function of GAM7957 is therefore inhibition of Mcm4 minichromosome maintenance deficient 4 (*s. cerevisiae*) (MCM4, Accession XP_030274.1), a gene which involved in the control of dna replication. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MCM4.

[57709] The function of MCM4 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM347.1. Methyl cpG binding protein 2 (retT syndrome) (MECP2, Accession NP_004983.1) is another GAM7957 target gene, herein designated TARGET GENE. MECP2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MECP2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MECP2 BINDING SITE, designated SEQ ID:3575, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57710] Another function of GAM7957 is therefore inhibition of Methyl cpG binding protein 2 (retT syndrome) (MECP2, Accession NP_004983.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MECP2.

[57711] MEGF10 (Accession NP_115822.1) is another GAM7957 target gene, herein designated TARGET GENE. MEGF10 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MEGF10, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MEGF10 BINDING SITE, designated SEQ ID:11788, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57712] Another function of GAM7957 is therefore inhibition of MEGF10 (Accession NP_115822.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MEGF10.

[57713] MEGF11 (Accession NP_115821.1) is another GAM7957 target gene, herein designated TARGET GENE. MEGF11 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MEGF11, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MEGF11 BINDING SITE, designated SEQ ID:5685, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57714] Another function of GAM7957 is therefore inhibition of MEGF11 (Accession NP_115821.1) . Accordingly, utilities

of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MEGF11.

[57715] Multiple endocrine neoplasia i (MEN1, Accession NP_570715.1) is another GAM7957 target gene, herein designated TARGET GENE. MEN1 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by MEN1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MEN1 BINDING SITE, designated SEQ ID:7241, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57716] Another function of GAM7957 is therefore inhibition of Multiple endocrine neoplasia i (MEN1, Accession NP_570715.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MEN1.

[57717] Multiple endocrine neoplasia i (MEN1, Accession NP_570716.1) is another GAM7957 target gene, herein designated TARGET GENE. MEN1 BINDING SITE is a target binding site found in the 5' untranslated region of multi-

ple transcripts of mRNA encoded by MEN1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MEN1 BINDING SITE, designated SEQ ID:7241, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57718] Another function of GAM7957 is therefore inhibition of Multiple endocrine neoplasia i (MEN1, Accession NP_570716.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MEN1.

[57719] MGC10200 (Accession NP_659497.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC10200 BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by MGC10200, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC10200 BINDING SITE, designated SEQ ID:17423, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57720] Another function of GAM7957 is therefore inhibition of

MGC10200 (Accession NP_659497.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC10200.

[57721] MGC10765 (Accession NP_077321.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC10765 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC10765, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC10765 BINDING SITE, designated SEQ ID:7629, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57722] Another function of GAM7957 is therefore inhibition of MGC10765 (Accession NP_077321.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC10765.

[57723] MGC10771 (Accession NP_078782.2) is another GAM7957 target gene, herein designated TARGET GENE. MGC10771 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC10771, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC10771 BINDING SITE, designated SEQ ID:19103, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57724] Another function of GAM7957 is therefore inhibition of MGC10771 (Accession NP_078782.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC10771.

[57725] MGC10814 (Accession NP_116060.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC10814 BINDING SITE1 and MGC10814 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by MGC10814, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC10814 BINDING SITE1 and MGC10814 BINDING SITE2, designated SEQ ID:15216 and SEQ ID:14900 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57726] Another function of GAM7957 is therefore inhibition of MGC10814 (Accession NP_116060.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC10814.

[57727] MGC10997 (Accession NP_116044.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC10997 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by MGC10997, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC10997 BINDING SITE, designated SEQ ID:10844, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57728] Another function of GAM7957 is therefore inhibition of MGC10997 (Accession NP_116044.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC10997.

[57729] MGC10999 (Accession NP_115683.2) is another GAM7957 target gene, herein designated TARGET GENE. MGC10999 BINDING SITE is a target binding site found in the 3` un-

translated region of mRNA encoded by MGC10999, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC10999 BINDING SITE, designated SEQ ID:11306, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57730] Another function of GAM7957 is therefore inhibition of MGC10999 (Accession NP_115683.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC10999.

[57731] MGC1136 (Accession NP_076930.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC1136 BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by MGC1136, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC1136 BINDING SITE, designated SEQ ID:15748, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57732] Another function of GAM7957 is therefore inhibition of

MGC1136 (Accession NP_076930.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC1136.

[57733] MGC11386 (Accession NP_116322.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC11386 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC11386, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC11386 BINDING SITE, designated SEQ ID:14786, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57734] Another function of GAM7957 is therefore inhibition of MGC11386 (Accession NP_116322.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC11386.

[57735] MGC12945 (Accession NP_115694.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC12945 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC12945, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC12945 BINDING SITE, designated SEQ ID:11532, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57736] Another function of GAM7957 is therefore inhibition of MGC12945 (Accession NP_115694.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC12945.

[57737] MGC13024 (Accession NP_689501.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC13024 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC13024, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC13024 BINDING SITE, designated SEQ ID:804, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57738] Another function of GAM7957 is therefore inhibition of MGC13024 (Accession NP_689501.1) . Accordingly, utili-

ties of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC13024.

[57739] MGC13053 (Accession NP_116099.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC13053 BINDING SITE1 and MGC13053 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by MGC13053, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC13053 BINDING SITE1 and MGC13053 BINDING SITE2, designated SEQ ID:8676 and SEQ ID:10475 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57740] Another function of GAM7957 is therefore inhibition of MGC13053 (Accession NP_116099.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC13053.

[57741] MGC13272 (Accession NP_115731.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC13272 BINDING SITE is a target binding site found in the 5' un-

translated region of mRNA encoded by MGC13272, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC13272 BINDING SITE, designated SEQ ID:2998, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57742] Another function of GAM7957 is therefore inhibition of MGC13272 (Accession NP_115731.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC13272.

[57743] MGC14126 (Accession NP_116287.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC14126 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC14126, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC14126 BINDING SITE, designated SEQ ID:12370, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57744] Another function of GAM7957 is therefore inhibition of

MGC14126 (Accession NP_116287.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC14126.

[57745] MGC14276 (Accession NP_694980.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC14276 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC14276, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC14276 BINDING SITE, designated SEQ ID:12189, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57746] Another function of GAM7957 is therefore inhibition of MGC14276 (Accession NP_694980.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC14276.

[57747] MGC14407 (Accession NP_116297.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC14407 BINDING SITE1 and MGC14407 BINDING SITE2 are target binding sites found in untranslated regions of mRNA en-

coded by MGC14407, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC14407 BINDING SITE1 and MGC14407 BINDING SITE2, designated SEQ ID:4378 and SEQ ID:10435 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57748] Another function of GAM7957 is therefore inhibition of MGC14407 (Accession NP_116297.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC14407.

[57749] MGC14436 (Accession NP_116286.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC14436 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC14436, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC14436 BINDING SITE, designated SEQ ID:18050, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57750] Another function of GAM7957 is therefore inhibition of MGC14436 (Accession NP_116286.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC14436.

[57751] MGC14799 (Accession NP_115712.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC14799 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC14799, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC14799 BINDING SITE, designated SEQ ID:6876, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57752] Another function of GAM7957 is therefore inhibition of MGC14799 (Accession NP_115712.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC14799.

[57753] MGC14817 (Accession NP_115714.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC14817 BINDING SITE1 and MGC14817 BINDING SITE2 are target

binding sites found in untranslated regions of mRNA encoded by MGC14817, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC14817 BINDING SITE1 and MGC14817 BINDING SITE2, designated SEQ ID:6787 and SEQ ID:13584 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57754] Another function of GAM7957 is therefore inhibition of MGC14817 (Accession NP_115714.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC14817.

[57755] MGC14836 (Accession NP_219480.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC14836 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC14836, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC14836 BINDING SITE, designated SEQ ID:17854, to the nucleotide sequence of GAM7957 RNA, herein design-

nated GAM RNA, also designated SEQ ID:297.

[57756] Another function of GAM7957 is therefore inhibition of MGC14836 (Accession NP_219480.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC14836.

[57757] MGC15397 (Accession NP_542383.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC15397 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC15397, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC15397 BINDING SITE, designated SEQ ID:15089, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57758] Another function of GAM7957 is therefore inhibition of MGC15397 (Accession NP_542383.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC15397.

[57759] MGC16037 (Accession NP_116276.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC16037

BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC16037, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC16037 BINDING SITE, designated SEQ ID:10438, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57760] Another function of GAM7957 is therefore inhibition of MGC16037 (Accession NP_116276.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC16037.

[57761] MGC16142 (Accession NP_116152.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC16142 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC16142, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC16142 BINDING SITE, designated SEQ ID:14332, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57762] Another function of GAM7957 is therefore inhibition of MGC16142 (Accession NP_116152.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC16142.

[57763] MGC16332 (Accession NP_612635.2) is another GAM7957 target gene, herein designated TARGET GENE. MGC16332 BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by MGC16332, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC16332 BINDING SITE, designated SEQ ID:17692, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57764] Another function of GAM7957 is therefore inhibition of MGC16332 (Accession NP_612635.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC16332.

[57765] MGC16384 (Accession NP_444276.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC16384 BINDING SITE is a target binding site found in the 3` un-

translated region of mRNA encoded by MGC16384, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC16384 BINDING SITE, designated SEQ ID:11946, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57766] Another function of GAM7957 is therefore inhibition of MGC16384 (Accession NP_444276.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC16384.

[57767] MGC16703 (Accession NP_659479.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC16703 BINDING SITE1 and MGC16703 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by MGC16703, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC16703 BINDING SITE1 and MGC16703 BINDING SITE2, designated SEQ ID:18312 and SEQ ID:4657 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also des-

ignated SEQ ID:297.

[57768] Another function of GAM7957 is therefore inhibition of MGC16703 (Accession NP_659479.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC16703.

[57769] MGC17791 (Accession NP_689575.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC17791 BINDING SITE1 through MGC17791 BINDING SITE5 are target binding sites found in untranslated regions of mRNA encoded by MGC17791, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC17791 BINDING SITE1 through MGC17791 BINDING SITE5, designated SEQ ID:11137, SEQ ID:6756, SEQ ID:10818, SEQ ID:16675 and SEQ ID:646 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57770] Another function of GAM7957 is therefore inhibition of MGC17791 (Accession NP_689575.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

MGC17791.

[57771] MGC17986 (Accession NP_705836.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC17986 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC17986, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC17986 BINDING SITE, designated SEQ ID:9086, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57772] Another function of GAM7957 is therefore inhibition of MGC17986 (Accession NP_705836.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC17986.

[57773] MGC20235 (Accession NP_659478.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC20235 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC20235, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

MGC20235 BINDING SITE, designated SEQ ID:6648, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57774] Another function of GAM7957 is therefore inhibition of MGC20235 (Accession NP_659478.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC20235.

[57775] MGC20481 (Accession NP_443081.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC20481 BINDING SITE1 and MGC20481 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by MGC20481, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC20481 BINDING SITE1 and MGC20481 BINDING SITE2, designated SEQ ID:19193 and SEQ ID:973 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57776] Another function of GAM7957 is therefore inhibition of MGC20481 (Accession NP_443081.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with MGC20481.

[57777] MGC20741 (Accession NP_061031.2) is another GAM7957 target gene, herein designated TARGET GENE. MGC20741 BINDING SITE1 and MGC20741 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by MGC20741, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC20741 BINDING SITE1 and MGC20741 BINDING SITE2, designated SEQ ID:17399 and SEQ ID:11529 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57778] Another function of GAM7957 is therefore inhibition of MGC20741 (Accession NP_061031.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC20741.

[57779] MGC20781 (Accession NP_443167.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC20781 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MGC20781, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC20781 BINDING SITE, designated SEQ ID:19781, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57780] Another function of GAM7957 is therefore inhibition of MGC20781 (Accession NP_443167.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC20781.

[57781] MGC23244 (Accession NP_653216.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC23244 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC23244, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC23244 BINDING SITE, designated SEQ ID:18691, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57782] Another function of GAM7957 is therefore inhibition of MGC23244 (Accession NP_653216.1) . Accordingly, utili-

ties of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC23244.

[57783] MGC23885 (Accession NP_689714.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC23885 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC23885, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC23885 BINDING SITE, designated SEQ ID:11744, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57784] Another function of GAM7957 is therefore inhibition of MGC23885 (Accession NP_689714.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC23885.

[57785] MGC2396 (Accession NP_443084.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC2396 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC2396, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC2396 BINDING SITE, designated SEQ ID:8496, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57786] Another function of GAM7957 is therefore inhibition of MGC2396 (Accession NP_443084.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC2396.

[57787] MGC2562 (Accession NP_115750.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC2562 BINDING SITE1 through MGC2562 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by MGC2562, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC2562 BINDING SITE1 through MGC2562 BINDING SITE3, designated SEQ ID:15818, SEQ ID:19241 and SEQ ID:6525 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57788] Another function of GAM7957 is therefore inhibition of

MGC2562 (Accession NP_115750.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC2562.

[57789] MGC26877 (Accession NP_653228.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC26877 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MGC26877, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC26877 BINDING SITE, designated SEQ ID:16438, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57790] Another function of GAM7957 is therefore inhibition of MGC26877 (Accession NP_653228.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC26877.

[57791] MGC2731 (Accession NP_076973.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC2731 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC2731, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC2731 BINDING SITE, designated SEQ ID:6364, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57792] Another function of GAM7957 is therefore inhibition of MGC2731 (Accession NP_076973.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC2731.

[57793] MGC29891 (Accession NP_653219.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC29891 BINDING SITE1 and MGC29891 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by MGC29891, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC29891 BINDING SITE1 and MGC29891 BINDING SITE2, designated SEQ ID:18690 and SEQ ID:15224 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57794] Another function of GAM7957 is therefore inhibition of MGC29891 (Accession NP_653219.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC29891.

[57795] MGC3169 (Accession NP_076979.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC3169 BINDING SITE1 and MGC3169 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by MGC3169, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC3169 BINDING SITE1 and MGC3169 BINDING SITE2, designated SEQ ID:11898 and SEQ ID:6847 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57796] Another function of GAM7957 is therefore inhibition of MGC3169 (Accession NP_076979.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC3169.

[57797] MGC3195 (Accession NP_114111.2) is another GAM7957

target gene, herein designated TARGET GENE. MGC3195 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC3195, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC3195 BINDING SITE, designated SEQ ID:8791, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57798] Another function of GAM7957 is therefore inhibition of MGC3195 (Accession NP_114111.2). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC3195.

[57799] MGC32020 (Accession NP_689479.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC32020 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC32020, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC32020 BINDING SITE, designated SEQ ID:18690, to the nucleotide sequence of GAM7957 RNA, herein design-

nated GAM RNA, also designated SEQ ID:297.

[57800] Another function of GAM7957 is therefore inhibition of MGC32020 (Accession NP_689479.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC32020.

[57801] MGC3207 (Accession NP_115661.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC3207 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC3207, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC3207 BINDING SITE, designated SEQ ID:2485, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57802] Another function of GAM7957 is therefore inhibition of MGC3207 (Accession NP_115661.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC3207.

[57803] MGC3329 (Accession NP_076991.2) is another GAM7957 target gene, herein designated TARGET GENE. MGC3329

BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC3329, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC3329 BINDING SITE, designated SEQ ID:17423, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57804] Another function of GAM7957 is therefore inhibition of MGC3329 (Accession NP_076991.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC3329.

[57805] MGC33488 (Accession NP_612359.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC33488 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC33488, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC33488 BINDING SITE, designated SEQ ID:16907, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57806] Another function of GAM7957 is therefore inhibition of MGC33488 (Accession NP_612359.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC33488.

[57807] MGC33547 (Accession NP_653262.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC33547 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MGC33547, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC33547 BINDING SITE, designated SEQ ID:20039, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57808] Another function of GAM7957 is therefore inhibition of MGC33547 (Accession NP_653262.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC33547.

[57809] MGC33653 (Accession NP_699177.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC33653 BINDING SITE is a target binding site found in the 3' un-

translated region of mRNA encoded by MGC33653, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC33653 BINDING SITE, designated SEQ ID:4802, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57810] Another function of GAM7957 is therefore inhibition of MGC33653 (Accession NP_699177.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC33653.

[57811] MGC33971 (Accession NP_699174.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC33971 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC33971, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC33971 BINDING SITE, designated SEQ ID:14635, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57812] Another function of GAM7957 is therefore inhibition of

MGC33971 (Accession NP_699174.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC33971.

[57813] MGC34034 (Accession NP_694956.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC34034 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC34034, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC34034 BINDING SITE, designated SEQ ID:3186, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57814] Another function of GAM7957 is therefore inhibition of MGC34034 (Accession NP_694956.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC34034.

[57815] MGC34079 (Accession NP_689688.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC34079 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC34079, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC34079 BINDING SITE, designated SEQ ID:743, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57816] Another function of GAM7957 is therefore inhibition of MGC34079 (Accession NP_689688.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC34079.

[57817] MGC34725 (Accession NP_775908.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC34725 BINDING SITE1 and MGC34725 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by MGC34725, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC34725 BINDING SITE1 and MGC34725 BINDING SITE2, designated SEQ ID:6790 and SEQ ID:18691 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57818] Another function of GAM7957 is therefore inhibition of MGC34725 (Accession NP_775908.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC34725.

[57819] MGC35295 (Accession NP_689930.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC35295 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC35295, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC35295 BINDING SITE, designated SEQ ID:15007, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57820] Another function of GAM7957 is therefore inhibition of MGC35295 (Accession NP_689930.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC35295.

[57821] MGC35352 (Accession NP_689773.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC35352 BINDING SITE is a target binding site found in the 3' un-

translated region of mRNA encoded by MGC35352, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC35352 BINDING SITE, designated SEQ ID:6472, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57822] Another function of GAM7957 is therefore inhibition of MGC35352 (Accession NP_689773.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC35352.

[57823] MGC35361 (Accession NP_671727.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC35361 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC35361, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC35361 BINDING SITE, designated SEQ ID:9208, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57824] Another function of GAM7957 is therefore inhibition of

MGC35361 (Accession NP_671727.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC35361.

[57825] MGC35440 (Accession NP_694952.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC35440 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC35440, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC35440 BINDING SITE, designated SEQ ID:12759, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57826] Another function of GAM7957 is therefore inhibition of MGC35440 (Accession NP_694952.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC35440.

[57827] MGC39518 (Accession NP_776183.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC39518 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MGC39518, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC39518 BINDING SITE, designated SEQ ID:8988, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57828] Another function of GAM7957 is therefore inhibition of MGC39518 (Accession NP_776183.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC39518.

[57829] MGC39633 (Accession NP_689762.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC39633 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MGC39633, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC39633 BINDING SITE, designated SEQ ID:5211, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57830] Another function of GAM7957 is therefore inhibition of MGC39633 (Accession NP_689762.1) . Accordingly, utili-

ties of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC39633.

[57831] MGC4248 (Accession NP_115709.2) is another GAM7957 target gene, herein designated TARGET GENE. MGC4248 BINDING SITE1 and MGC4248 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by MGC4248, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC4248 BINDING SITE1 and MGC4248 BINDING SITE2, designated SEQ ID:5210 and SEQ ID:15981 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57832] Another function of GAM7957 is therefore inhibition of MGC4248 (Accession NP_115709.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC4248.

[57833] MGC43033 (Accession NP_689924.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC43033 BINDING SITE is a target binding site found in the 3' un-

translated region of mRNA encoded by MGC43033, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC43033 BINDING SITE, designated SEQ ID:11412, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57834] Another function of GAM7957 is therefore inhibition of MGC43033 (Accession NP_689924.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC43033.

[57835] MGC43537 (Accession NP_848639.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC43537 BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by MGC43537, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC43537 BINDING SITE, designated SEQ ID:1686, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57836] Another function of GAM7957 is therefore inhibition of

MGC43537 (Accession NP_848639.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC43537.

[57837] MGC4562 (Accession NP_588616.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC4562 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC4562, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC4562 BINDING SITE, designated SEQ ID:972, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57838] Another function of GAM7957 is therefore inhibition of MGC4562 (Accession NP_588616.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC4562.

[57839] MGC45806 (Accession NP_689517.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC45806 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC45806, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC45806 BINDING SITE, designated SEQ ID:13687, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57840] Another function of GAM7957 is therefore inhibition of MGC45806 (Accession NP_689517.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC45806.

[57841] MGC46336 (Accession XP_290712.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC46336 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC46336, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC46336 BINDING SITE, designated SEQ ID:15343, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57842] Another function of GAM7957 is therefore inhibition of MGC46336 (Accession XP_290712.1) . Accordingly, utili-

ties of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC46336.

[57843] MGC4771 (Accession NP_116057.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC4771 BINDING SITE1 and MGC4771 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by MGC4771, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC4771 BINDING SITE1 and MGC4771 BINDING SITE2, designated SEQ ID:13162 and SEQ ID:9499 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57844] Another function of GAM7957 is therefore inhibition of MGC4771 (Accession NP_116057.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC4771.

[57845] MGC4840 (Accession NP_113678.2) is another GAM7957 target gene, herein designated TARGET GENE. MGC4840 BINDING SITE1 and MGC4840 BINDING SITE2 are target

binding sites found in untranslated regions of mRNA encoded by MGC4840, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC4840 BINDING SITE1 and MGC4840 BINDING SITE2, designated SEQ ID:2546 and SEQ ID:9736 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57846] Another function of GAM7957 is therefore inhibition of MGC4840 (Accession NP_113678.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC4840.

[57847] MGC50836 (Accession XP_171060.1) is another GAM7957 target gene, herein designated TARGET GENE. MGC50836 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC50836, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC50836 BINDING SITE, designated SEQ ID:5072, to the nucleotide sequence of GAM7957 RNA, herein designated

GAM RNA, also designated SEQ ID:297.

[57848] Another function of GAM7957 is therefore inhibition of MGC50836 (Accession XP_171060.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC50836.

[57849] Matrix metalloproteinase 8 (neutrophil collagenase) (MMP8, Accession NP_002415.1) is another GAM7957 target gene, herein designated TARGET GENE. MMP8 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MMP8, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MMP8 BINDING SITE, designated SEQ ID:6716, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57850] Another function of GAM7957 is therefore inhibition of Matrix metalloproteinase 8 (neutrophil collagenase) (MMP8, Accession NP_002415.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MMP8.

[57851] Myelin oligodendrocyte glycoprotein (MOG, Accession

NP_002424.1) is another GAM7957 target gene, herein designated TARGET GENE. MOG BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MOG, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MOG BINDING SITE, designated SEQ ID:17403, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57852] Another function of GAM7957 is therefore inhibition of Myelin oligodendrocyte glycoprotein (MOG, Accession NP_002424.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MOG.

[57853] MOST2 (Accession NP_064635.1) is another GAM7957 target gene, herein designated TARGET GENE. MOST2 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MOST2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MOST2 BINDING SITE, designated SEQ ID:18624, to the

nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57854] Another function of GAM7957 is therefore inhibition of MOST2 (Accession NP_064635.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MOST2.

[57855] Mre11 meiotic recombination 11 homolog a (*s. cerevisiae*) (MRE11A, Accession NP_005582.1) is another GAM7957 target gene, herein designated TARGET GENE. MRE11A BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by MRE11A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MRE11A BINDING SITE, designated SEQ ID:5020, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57856] Another function of GAM7957 is therefore inhibition of Mre11 meiotic recombination 11 homolog a (*s. cerevisiae*) (MRE11A, Accession NP_005582.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

MRE11A.

[57857] Mre11 meiotic recombination 11 homolog a (*s. cerevisiae*) (MRE11A, Accession NP_005581.2) is another GAM7957 target gene, herein designated TARGET GENE. MRE11A BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by MRE11A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MRE11A BINDING SITE, designated SEQ ID:5020, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57858] Another function of GAM7957 is therefore inhibition of Mre11 meiotic recombination 11 homolog a (*s. cerevisiae*) (MRE11A, Accession NP_005581.2). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MRE11A.

[57859] Mitochondrial ribosomal protein 63 (MRP63, Accession NP_076931.1) is another GAM7957 target gene, herein designated TARGET GENE. MRP63 BINDING SITE1 and MRP63 BINDING SITE2 are target binding sites found in

untranslated regions of mRNA encoded by MRP63, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MRP63 BINDING SITE1 and MRP63 BINDING SITE2, designated SEQ ID:4181 and SEQ ID:4128 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57860] Another function of GAM7957 is therefore inhibition of Mitochondrial ribosomal protein 63 (MRP63, Accession NP_076931.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MRP63.

[57861] Mitochondrial ribosomal protein I24 (MRPL24, Accession NP_663781.1) is another GAM7957 target gene, herein designated TARGET GENE. MRPL24 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by MRPL24, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MRPL24 BINDING SITE, designated SEQ ID:16165, to the nucleotide sequence of GAM7957 RNA, herein designated

GAM RNA, also designated SEQ ID:297.

[57862] Another function of GAM7957 is therefore inhibition of Mitochondrial ribosomal protein I24 (MRPL24, Accession NP_663781.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MRPL24.

[57863] Mitochondrial ribosomal protein I30 (MRPL30, Accession NP_660213.1) is another GAM7957 target gene, herein designated TARGET GENE. MRPL30 BINDING SITE1 and MRPL30 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by MRPL30, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MRPL30 BINDING SITE1 and MRPL30 BINDING SITE2, designated SEQ ID:2031 and SEQ ID:13065 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57864] Another function of GAM7957 is therefore inhibition of Mitochondrial ribosomal protein I30 (MRPL30, Accession NP_660213.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical

cal conditions associated with MRPL30.

[57865] Mitochondrial ribosomal protein I4 (MRPL4, Accession NP_666500.1) is another GAM7957 target gene, herein designated TARGET GENE. MRPL4 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by MRPL4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MRPL4 BINDING SITE, designated SEQ ID:1750, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57866] Another function of GAM7957 is therefore inhibition of Mitochondrial ribosomal protein I4 (MRPL4, Accession NP_666500.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MRPL4.

[57867] Mitochondrial ribosomal protein I52 (MRPL52, Accession NP_851823.1) is another GAM7957 target gene, herein designated TARGET GENE. MRPL52 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by MRPL52, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MRPL52 BINDING SITE, designated SEQ ID:6651, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57868] Another function of GAM7957 is therefore inhibition of Mitochondrial ribosomal protein I52 (MRPL52, Accession NP_851823.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MRPL52.

[57869] Mitochondrial ribosomal protein I52 (MRPL52, Accession NP_851821.1) is another GAM7957 target gene, herein designated TARGET GENE. MRPL52 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by MRPL52, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MRPL52 BINDING SITE, designated SEQ ID:6651, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57870] Another function of GAM7957 is therefore inhibition of Mitochondrial ribosomal protein I52 (MRPL52, Accession

NP_851821.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MRPL52.

[57871] Mitochondrial ribosomal protein I52 (MRPL52, Accession NP_851312.1) is another GAM7957 target gene, herein designated TARGET GENE. MRPL52 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by MRPL52, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MRPL52 BINDING SITE, designated SEQ ID:6651, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57872] Another function of GAM7957 is therefore inhibition of Mitochondrial ribosomal protein I52 (MRPL52, Accession NP_851312.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MRPL52.

[57873] Mitochondrial ribosomal protein I52 (MRPL52, Accession NP_848026.1) is another GAM7957 target gene, herein designated TARGET GENE. MRPL52 BINDING SITE is a target binding site found in the 3' untranslated region of

multiple transcripts of mRNA encoded by MRPL52, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MRPL52 BINDING SITE, designated SEQ ID:6651, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57874] Another function of GAM7957 is therefore inhibition of Mitochondrial ribosomal protein I52 (MRPL52, Accession NP_848026.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MRPL52.

[57875] Mitochondrial ribosomal protein I52 (MRPL52, Accession NP_851313.1) is another GAM7957 target gene, herein designated TARGET GENE. MRPL52 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by MRPL52, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MRPL52 BINDING SITE, designated SEQ ID:6651, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57876] Another function of GAM7957 is therefore inhibition of Mitochondrial ribosomal protein I52 (MRPL52, Accession NP_851313.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MRPL52.

[57877] Mitochondrial ribosomal protein I52 (MRPL52, Accession NP_851824.1) is another GAM7957 target gene, herein designated TARGET GENE. MRPL52 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by MRPL52, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MRPL52 BINDING SITE, designated SEQ ID:6651, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57878] Another function of GAM7957 is therefore inhibition of Mitochondrial ribosomal protein I52 (MRPL52, Accession NP_851824.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MRPL52.

[57879] Mitochondrial ribosomal protein I52 (MRPL52, Accession NP_851822.1) is another GAM7957 target gene, herein

designated TARGET GENE. MRPL52 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by MRPL52, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MRPL52 BINDING SITE, designated SEQ ID:6651, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57880] Another function of GAM7957 is therefore inhibition of Mitochondrial ribosomal protein I52 (MRPL52, Accession NP_851822.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MRPL52.

[57881] Mitochondrial ribosomal protein s10 (MRPS10, Accession NP_060611.2) is another GAM7957 target gene, herein designated TARGET GENE. MRPS10 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MRPS10, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MRPS10 BINDING SITE, designated SEQ ID:3585, to the nucleotide sequence

of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57882] Another function of GAM7957 is therefore inhibition of Mitochondrial ribosomal protein s10 (MRPS10, Accession NP_060611.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MRPS10.

[57883] Mitochondrial ribosomal protein s18b (MRPS18B, Accession NP_054765.1) is another GAM7957 target gene, herein designated TARGET GENE. MRPS18B BINDING SITE1 and MRPS18B BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by MRPS18B, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MRPS18B BINDING SITE1 and MRPS18B BINDING SITE2, designated SEQ ID:13965 and SEQ ID:12993 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57884] Another function of GAM7957 is therefore inhibition of Mitochondrial ribosomal protein s18b (MRPS18B, Accession NP_054765.1) . Accordingly, utilities of GAM7957 in-

clude diagnosis, prevention and treatment of diseases and clinical conditions associated with MRPS18B.

[57885] Membrane-spanning 4-domains, subfamily a, member 2 (fc fragment of ige, high affinity i, receptor for; beta polypeptide) (MS4A2, Accession NP_000130.1) is another GAM7957 target gene, herein designated TARGET GENE. MS4A2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MS4A2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MS4A2 BINDING SITE, designated SEQ ID:18691, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57886] Another function of GAM7957 is therefore inhibition of Membrane-spanning 4-domains, subfamily a, member 2 (fc fragment of ige, high affinity i, receptor for; beta polypeptide) (MS4A2, Accession NP_000130.1), a gene which binds to the fc region of immunoglobulins epsilon. and therefore may be associated with Atopic asthma, atopic dermatitis. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Atopic asthma, atopic dermatitis, and of other diseases and clini-

cal conditions associated with MS4A2.

[57887] The function of MS4A2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM63.1.MSCP (Accession NP_057696.1) is another GAM7957 target gene, herein designated TARGET GENE. MSCP BINDING SITE is a target binding site found in the 3` untranslated region of multiple transcripts of mRNA encoded by MSCP, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MSCP BINDING SITE, designated SEQ ID:5159, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57888] Another function of GAM7957 is therefore inhibition of MSCP (Accession NP_057696.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MSCP.

[57889] MSCP (Accession NP_061049.2) is another GAM7957 target gene, herein designated TARGET GENE. MSCP BINDING SITE is a target binding site found in the 3` untranslated region of multiple transcripts of mRNA encoded by MSCP,

corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MSCP BINDING SITE, designated SEQ ID:5159, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57890] Another function of GAM7957 is therefore inhibition of MSCP (Accession NP_061049.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MSCP.

[57891] Muts homolog 3 (e. coli) (MSH3, Accession NP_002430.1) is another GAM7957 target gene, herein designated TARGET GENE. MSH3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MSH3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MSH3 BINDING SITE, designated SEQ ID:6752, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57892] Another function of GAM7957 is therefore inhibition of Muts homolog 3 (e. coli) (MSH3, Accession NP_002430.1), a gene which belongs to the dna mismatch repair muts

family. and therefore may be associated with Hereditary nonpolyposis colorectal cancer. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Hereditary nonpolyposis colorectal cancer, and of other diseases and clinical conditions associated with MSH3.

[57893] The function of MSH3 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM347.1. Muts homolog 5 (e. coli) (MSH5, Accession NP_002432.1) is another GAM7957 target gene, herein designated TARGET GENE. MSH5 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by MSH5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MSH5 BINDING SITE, designated SEQ ID:12084, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57894] Another function of GAM7957 is therefore inhibition of Muts homolog 5 (e. coli) (MSH5, Accession NP_002432.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions

associated with MSH5.

[57895] Myotubularin related protein 9 (MTMR9, Accession NP_056273.2) is another GAM7957 target gene, herein designated TARGET GENE. MTMR9 BINDING SITE1 and MTMR9 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by MTMR9, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MTMR9 BINDING SITE1 and MTMR9 BINDING SITE2, designated SEQ ID:19031 and SEQ ID:14781 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57896] Another function of GAM7957 is therefore inhibition of Myotubularin related protein 9 (MTMR9, Accession NP_056273.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MTMR9.

[57897] Melatonin receptor 1a (MTNR1A, Accession NP_005949.1) is another GAM7957 target gene, herein designated TARGET GENE. MTNR1A BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MTNR1A, corresponding to a target binding site such as

BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MTNR1A BINDING SITE, designated SEQ ID:4731, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57898] Another function of GAM7957 is therefore inhibition of Melatonin receptor 1a (MTNR1A, Accession NP_005949.1), a gene which likely mediates the reproductive and circadian actions of melatonin. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MTNR1A.

[57899] The function of MTNR1A and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM401.1.MU (Accession NP_071368.1) is another GAM7957 target gene, herein designated TARGET GENE. MU BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MU, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MU BINDING SITE, designated SEQ ID:17421, to the nu-

cleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57900] Another function of GAM7957 is therefore inhibition of MU (Accession NP_071368.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MU.

[57901] Mucin 13, epithelial transmembrane (MUC13, Accession NP_149038.1) is another GAM7957 target gene, herein designated TARGET GENE. MUC13 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MUC13, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MUC13 BINDING SITE, designated SEQ ID:13548, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57902] Another function of GAM7957 is therefore inhibition of Mucin 13, epithelial transmembrane (MUC13, Accession NP_149038.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MUC13.

[57903] Mucin 6, gastric (MUC6, Accession XP_290540.1) is an-

other GAM7957 target gene, herein designated TARGET GENE. MUC6 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MUC6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MUC6 BINDING SITE, designated SEQ ID:2101, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57904] Another function of GAM7957 is therefore inhibition of Mucin 6, gastric (MUC6, Accession XP_290540.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MUC6.

[57905] Mucin and cadherin-like (MUCDHL, Accession NP_112555.1) is another GAM7957 target gene, herein designated TARGET GENE. MUCDHL BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by MUCDHL, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MUCDHL BINDING SITE, designated SEQ ID:3704, to the

nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57906] Another function of GAM7957 is therefore inhibition of Mucin and cadherin-like (MUCDHL, Accession NP_112555.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MUCDHL.

[57907] Max interacting protein 1 (MXI1, Accession NP_005953.2) is another GAM7957 target gene, herein designated TARGET GENE. MXI1 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by MXI1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MXI1 BINDING SITE, designated SEQ ID:17318, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57908] Another function of GAM7957 is therefore inhibition of Max interacting protein 1 (MXI1, Accession NP_005953.2), a gene which acts as a tumor suppressor in vivo, engages the MYC network in a functionally relevant manner and therefore may be associated with Prostate cancer, neurofi-

bro sarcoma. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Prostate cancer, neurofibrosarcoma, and of other diseases and clinical conditions associated with MXI1.

[57909] The function of MXI1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM94.1.V-myb myeloblastosis viral oncogene homolog (avian)-like 2 (MYBL2, Accession NP_002457.1) is another GAM7957 target gene, herein designated TARGET GENE. MYBL2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MYBL2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MYBL2 BINDING SITE, designated SEQ ID:14569, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57910] Another function of GAM7957 is therefore inhibition of V-myb myeloblastosis viral oncogene homolog (avian)-like 2 (MYBL2, Accession NP_002457.1), a gene which plays an essential role during cell cycle progression. Accordingly,

utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MYBL2.

[57911] The function of MYBL2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM215.1. Myosin, heavy polypeptide 7b, cardiac muscle, beta (MYH7B, Accession NP_219492.1) is another GAM7957 target gene, herein designated TARGET GENE. MYH7B BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MYH7B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MYH7B BINDING SITE, designated SEQ ID:8697, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57912] Another function of GAM7957 is therefore inhibition of Myosin, heavy polypeptide 7b, cardiac muscle, beta (MYH7B, Accession NP_219492.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MYH7B.

[57913] Myosin id (MYO1D, Accession XP_050041.4) is another

GAM7957 target gene, herein designated TARGET GENE. MYO1D BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MYO1D, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MYO1D BINDING SITE, designated SEQ ID:1521, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57914] Another function of GAM7957 is therefore inhibition of Myosin id (MYO1D, Accession XP_050041.4), a gene which is an unconventional myosin. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MYO1D.

[57915] The function of MYO1D and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM227.1. Myozenin 3 (MYOZ3, Accession NP_588612.1) is another GAM7957 target gene, herein designated TARGET GENE. MYOZ3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MYOZ3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III

of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MYOZ3 BINDING SITE, designated SEQ ID:8407, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57916] Another function of GAM7957 is therefore inhibition of Myozenin 3 (MYOZ3, Accession NP_588612.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MYOZ3.

[57917] N4BP2 (Accession NP_060647.2) is another GAM7957 target gene, herein designated TARGET GENE. N4BP2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by N4BP2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of N4BP2 BINDING SITE, designated SEQ ID:4033, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57918] Another function of GAM7957 is therefore inhibition of N4BP2 (Accession NP_060647.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of

diseases and clinical conditions associated with N4BP2.

[57919] N4BP3 (Accession XP_038920.2) is another GAM7957 target gene, herein designated TARGET GENE. N4BP3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by N4BP3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of N4BP3 BINDING SITE, designated SEQ ID:10245, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57920] Another function of GAM7957 is therefore inhibition of N4BP3 (Accession XP_038920.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with N4BP3.

[57921] NALP12 (Accession NP_653288.1) is another GAM7957 target gene, herein designated TARGET GENE. NALP12 BINDING SITE1 and NALP12 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by NALP12, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NALP12

BINDING SITE1 and NALP12 BINDING SITE2, designated SEQ ID:9765 and SEQ ID:19050 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57922] Another function of GAM7957 is therefore inhibition of NALP12 (Accession NP_653288.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NALP12.

[57923] NAP4 (Accession XP_294897.2) is another GAM7957 target gene, herein designated TARGET GENE. NAP4 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by NAP4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NAP4 BINDING SITE, designated SEQ ID:9627, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57924] Another function of GAM7957 is therefore inhibition of NAP4 (Accession XP_294897.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NAP4.

[57925] N-acetyltransferase 5 (ard1 homolog, *s. cerevisiae*) (NAT5, Accession NP_852668.1) is another GAM7957 target gene, herein designated TARGET GENE. NAT5 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by NAT5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NAT5 BINDING SITE, designated SEQ ID:19510, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57926] Another function of GAM7957 is therefore inhibition of N-acetyltransferase 5 (ard1 homolog, *s. cerevisiae*) (NAT5, Accession NP_852668.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NAT5.

[57927] N-acetyltransferase 5 (ard1 homolog, *s. cerevisiae*) (NAT5, Accession NP_852669.1) is another GAM7957 target gene, herein designated TARGET GENE. NAT5 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by NAT5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of NAT5 BINDING SITE, designated SEQ ID:19510, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57928] Another function of GAM7957 is therefore inhibition of N-acetyltransferase 5 (ard1 homolog, *s. cerevisiae*) (NAT5, Accession NP_852669.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NAT5.

[57929] N-acetyltransferase 5 (ard1 homolog, *s. cerevisiae*) (NAT5, Accession NP_057184.1) is another GAM7957 target gene, herein designated TARGET GENE. NAT5 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by NAT5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NAT5 BINDING SITE, designated SEQ ID:19510, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57930] Another function of GAM7957 is therefore inhibition of N-acetyltransferase 5 (ard1 homolog, *s. cerevisiae*) (NAT5, Accession NP_057184.1) . Accordingly, utilities of

GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NAT5.

[57931] NCAG1 (Accession NP_115536.1) is another GAM7957 target gene, herein designated TARGET GENE. NCAG1 BINDING SITE1 and NCAG1 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by NCAG1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NCAG1 BINDING SITE1 and NCAG1 BINDING SITE2, designated SEQ ID:20079 and SEQ ID:12727 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57932] Another function of GAM7957 is therefore inhibition of NCAG1 (Accession NP_115536.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NCAG1.

[57933] Nadh dehydrogenase (ubiquinone) fe-s protein 2, 49kda (nadh-coenzyme q reductase) (NDUFS2, Accession NP_004541.1) is another GAM7957 target gene, herein designated TARGET GENE. NDUFS2 BINDING SITE is a target binding site found in the 5' untranslated region of

mRNA encoded by NDUFS2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NDUFS2 BINDING SITE, designated SEQ ID:4978, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57934] Another function of GAM7957 is therefore inhibition of NADH dehydrogenase (ubiquinone) Fe-S protein 2, 49kDa (NADH-coenzyme Q reductase) (NDUFS2, Accession NP_004541.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NDUFS2.

[57935] Nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 3 (NFATC3, Accession NP_775187.1) is another GAM7957 target gene, herein designated TARGET GENE. NFATC3 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by NFATC3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NFATC3 BINDING SITE, designated SEQ ID:10867, to the nucleotide se-

quence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57936] Another function of GAM7957 is therefore inhibition of Nuclear factor of activated t-cells, cytoplasmic, calcineurin-dependent 3 (NFATC3, Accession NP_775187.1), a gene which plays a role in the inducible expression of cytokine genes in t cells. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NFATC3.

[57937] The function of NFATC3 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM347.1. Nuclear factor of kappa light polypeptide gene enhancer in b-cells inhibitor-like 2 (NFKBIL2, Accession NP_038460.2) is another GAM7957 target gene, herein designated TARGET GENE. NFKBIL2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by NFKBIL2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NFKBIL2 BINDING SITE, designated SEQ ID:15343, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA,

also designated SEQ ID:297.

[57938] Another function of GAM7957 is therefore inhibition of Nuclear factor of kappa light polypeptide gene enhancer in b-cells inhibitor-like 2 (NFKBIL2, Accession NP_038460.2), a gene which may have a role in regulating NF- kappa B function in epithelial cells. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NFKBIL2.

[57939] The function of NFKBIL2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM347.2. Nuclear transcription factor, x-box binding 1 (NFX1, Accession NP_667345.1) is another GAM7957 target gene, herein designated TARGET GENE. NFX1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by NFX1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NFX1 BINDING SITE, designated SEQ ID:12058, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57940] Another function of GAM7957 is therefore inhibition of Nuclear transcription factor, x-box binding 1 (NFX1, Accession NP_667345.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NFX1.

[57941] Nescient helix loop helix 1 (NHLH1, Accession NP_005589.1) is another GAM7957 target gene, herein designated TARGET GENE. NHLH1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by NHLH1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NHLH1 BINDING SITE, designated SEQ ID:5156, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57942] Another function of GAM7957 is therefore inhibition of Nescient helix loop helix 1 (NHLH1, Accession NP_005589.1), a gene which may have a role in development of the nervous system. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NHLH1.

[57943] The function of NHLH1 and its association with various

diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM354.1.NMNAT1 (Accession NP_073624.2) is another GAM7957 target gene, herein designated TARGET GENE. NMNAT1 BINDING SITE1 through NMNAT1 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by NMNAT1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NMNAT1 BINDING SITE1 through NMNAT1 BINDING SITE3, designated SEQ ID:13691, SEQ ID:16965 and SEQ ID:15904 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57944] Another function of GAM7957 is therefore inhibition of NMNAT1 (Accession NP_073624.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NMNAT1.

[57945] N-myristoyltransferase 2 (NMT2, Accession NP_004799.1) is another GAM7957 target gene, herein designated TARGET GENE. NMT2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by

NMT2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NMT2 BINDING SITE, designated SEQ ID:8031, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57946] Another function of GAM7957 is therefore inhibition of N-myristoyltransferase 2 (NMT2, Accession NP_004799.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NMT2.

[57947] Nodal homolog (mouse) (NODAL, Accession NP_060525.2) is another GAM7957 target gene, herein designated TARGET GENE. NODAL BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by NODAL, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NODAL BINDING SITE, designated SEQ ID:12796, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57948] Another function of GAM7957 is therefore inhibition of Nodal homolog (mouse) (NODAL, Accession NP_060525.2). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NODAL.

[57949] Non-pou domain containing, octamer-binding (NONO, Accession NP_031389.2) is another GAM7957 target gene, herein designated TARGET GENE. NONO BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by NONO, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NONO BINDING SITE, designated SEQ ID:5857, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57950] Another function of GAM7957 is therefore inhibition of Non-pou domain containing, octamer-binding (NONO, Accession NP_031389.2), a gene which is a nuclear protein which contains RNA recognition motifs. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NONO.

[57951] The function of NONO and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1.Nephronophthisis 1 (juvenile) (NPHP1, Accession NP_000263.1) is another GAM7957 target gene, herein designated TARGET GENE. NPHP1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by NPHP1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NPHP1 BINDING SITE, designated SEQ ID:15224, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57952] Another function of GAM7957 is therefore inhibition of Nephronophthisis 1 (juvenile) (NPHP1, Accession NP_000263.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NPHP1.

[57953] Nephrosis 1, congenital, finnish type (nephrin) (NPHS1, Accession NP_004637.1) is another GAM7957 target gene, herein designated TARGET GENE. NPHS1 BINDING SITE is a target binding site found in the 3' untranslated region of

mRNA encoded by NPHS1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NPHS1 BINDING SITE, designated SEQ ID:14789, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57954] Another function of GAM7957 is therefore inhibition of Nephrosis 1, congenital, finnish type (nephrin) (NPHS1, Accession NP_004637.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NPHS1.

[57955] Neuronal pentraxin receptor (NPTXR, Accession NP_055108.2) is another GAM7957 target gene, herein designated TARGET GENE. NPTXR BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by NPTXR, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NPTXR BINDING SITE, designated SEQ ID:5234, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57956] Another function of GAM7957 is therefore inhibition of Neuronal pentraxin receptor (NPTXR, Accession NP_055108.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NPTXR.

[57957] Neuronal pentraxin receptor (NPTXR, Accession NP_478058.1) is another GAM7957 target gene, herein designated TARGET GENE. NPTXR BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by NPTXR, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NPTXR BINDING SITE, designated SEQ ID:5234, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57958] Another function of GAM7957 is therefore inhibition of Neuronal pentraxin receptor (NPTXR, Accession NP_478058.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NPTXR.

[57959] Neuropeptide γ receptor $\gamma 2$ (NPY2R, Accession NP_000901.1) is another GAM7957 target gene, herein

designated TARGET GENE. NPY2R BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by NPY2R, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NPY2R BINDING SITE, designated SEQ ID:11027, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57960] Another function of GAM7957 is therefore inhibition of Neuropeptide y receptor y2 (NPY2R, Accession NP_000901.1), a gene which stimulates intracellular calcium flux and may modulate psychomotor activity, food intake, endocrine secretion and vasoconstriction. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NPY2R.

[57961] The function of NPY2R and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM401.1.5'-nucleotidase, cytosolic ii (NT5C2, Accession NP_036361.1) is another GAM7957 target gene, herein designated TARGET GENE. NT5C2 BINDING SITE is a

target binding site found in the 3' untranslated region of mRNA encoded by NT5C2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NT5C2 BINDING SITE, designated SEQ ID:19192, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57962] Another function of GAM7957 is therefore inhibition of 5'-nucleotidase, cytosolic ii (NT5C2, Accession NP_036361.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NT5C2.

[57963] NUP43 (Accession NP_078923.2) is another GAM7957 target gene, herein designated TARGET GENE. NUP43 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by NUP43, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NUP43 BINDING SITE, designated SEQ ID:2851, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57964] Another function of GAM7957 is therefore inhibition of NUP43 (Accession NP_078923.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NUP43.

[57965] Nucleoporin 62kda (NUP62, Accession NP_036478.2) is another GAM7957 target gene, herein designated TARGET GENE. NUP62 BINDING SITE1 and NUP62 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by NUP62, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NUP62 BINDING SITE1 and NUP62 BINDING SITE2, designated SEQ ID:12360 and SEQ ID:1492 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57966] Another function of GAM7957 is therefore inhibition of Nucleoporin 62kda (NUP62, Accession NP_036478.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NUP62.

[57967] Nucleoporin 62kda (NUP62, Accession NP_714941.1) is another GAM7957 target gene, herein designated TARGET

GENE. NUP62 BINDING SITE1 and NUP62 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by NUP62, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NUP62 BINDING SITE1 and NUP62 BINDING SITE2, designated SEQ ID:1492 and SEQ ID:12360 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57968] Another function of GAM7957 is therefore inhibition of Nucleoporin 62kda (NUP62, Accession NP_714941.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NUP62.

[57969] Nucleoporin 62kda (NUP62, Accession NP_714940.1) is another GAM7957 target gene, herein designated TARGET GENE. NUP62 BINDING SITE1 and NUP62 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by NUP62, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

NUP62 BINDING SITE1 and NUP62 BINDING SITE2, designated SEQ ID:1492 and SEQ ID:12360 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57970] Another function of GAM7957 is therefore inhibition of Nucleoporin 62kda (NUP62, Accession NP_714940.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NUP62.

[57971] Nucleoporin 62kda (NUP62, Accession NP_057637.2) is another GAM7957 target gene, herein designated TARGET GENE. NUP62 BINDING SITE1 and NUP62 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by NUP62, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NUP62 BINDING SITE1 and NUP62 BINDING SITE2, designated SEQ ID:12360 and SEQ ID:1492 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57972] Another function of GAM7957 is therefore inhibition of Nucleoporin 62kda (NUP62, Accession NP_057637.2) . Ac-

cordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NUP62.

[57973] NUPL1 (Accession NP_054808.1) is another GAM7957 target gene, herein designated TARGET GENE. NUPL1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by NUPL1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NUPL1 BINDING SITE, designated SEQ ID:4937, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57974] Another function of GAM7957 is therefore inhibition of NUPL1 (Accession NP_054808.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NUPL1.

[57975] ODAG (Accession NP_066990.2) is another GAM7957 target gene, herein designated TARGET GENE. ODAG BINDING SITE1 and ODAG BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by ODAG, corresponding to target binding sites such as

BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ODAG BINDING SITE1 and ODAG BINDING SITE2, designated SEQ ID:15089 and SEQ ID:6298 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57976] Another function of GAM7957 is therefore inhibition of ODAG (Accession NP_066990.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ODAG.

[57977] 8-oxoguanine dna glycosylase (OGG1, Accession NP_058213.1) is another GAM7957 target gene, herein designated TARGET GENE. OGG1 BINDING SITE is a target binding site found in the 5` untranslated region of multiple transcripts of mRNA encoded by OGG1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of OGG1 BINDING SITE, designated SEQ ID:15343, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57978] Another function of GAM7957 is therefore inhibition of

8-oxoguanine dna glycosylase (OGG1, Accession NP_058213.1), a gene which is involved in base excision DNA repair and removal of 8- oxyguanine and therefore may be associated with Tumorigenesis. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Tumorigenesis, and of other diseases and clinical conditions associated with OGG1.

[57979] The function of OGG1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM63.1.8-oxoguanine dna glycosylase (OGG1, Accession NP_058212.1) is another GAM7957 target gene, herein designated TARGET GENE. OGG1 BINDING SITE is a target binding site found in the 5` untranslated region of multiple transcripts of mRNA encoded by OGG1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of OGG1 BINDING SITE, designated SEQ ID:15343, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57980] Another function of GAM7957 is therefore inhibition of 8-oxoguanine dna glycosylase (OGG1, Accession

NP_058212.1), a gene which is involved in base excision DNA repair and removal of 8-oxoguanine and therefore may be associated with Tumorigenesis. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Tumorigenesis, and of other diseases and clinical conditions associated with OGG1.

[57981] The function of OGG1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM63.1.8-oxoguanine dna glycosylase (OGG1, Accession NP_002533.1) is another GAM7957 target gene, herein designated TARGET GENE. OGG1 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by OGG1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of OGG1 BINDING SITE, designated SEQ ID:15343, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57982] Another function of GAM7957 is therefore inhibition of 8-oxoguanine dna glycosylase (OGG1, Accession NP_002533.1), a gene which is involved in base excision

DNA repair and removal of 8- oxyguanine and therefore may be associated with Tumorigenesis. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Tumorigenesis, and of other diseases and clinical conditions associated with OGG1.

[57983] The function of OGG1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM63.1. Optic atrophy 3 (autosomal recessive, with chorea and spastic paraplegia) (OPA3, Accession NP_079412.1) is another GAM7957 target gene, herein designated TARGET GENE. OPA3 BINDING SITE1 and OPA3 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by OPA3, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of OPA3 BINDING SITE1 and OPA3 BINDING SITE2, designated SEQ ID:1507 and SEQ ID:15089 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57984] Another function of GAM7957 is therefore inhibition of Optic atrophy 3 (autosomal recessive, with chorea and

spastic paraplegia) (OPA3, Accession NP_079412.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with OPA3.

[57985] Origin recognition complex, subunit 6 homolog-like (yeast) (ORC6L, Accession NP_055136.1) is another GAM7957 target gene, herein designated TARGET GENE. ORC6L BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ORC6L, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ORC6L BINDING SITE, designated SEQ ID:8790, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57986] Another function of GAM7957 is therefore inhibition of Origin recognition complex, subunit 6 homolog-like (yeast) (ORC6L, Accession NP_055136.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ORC6L.

[57987] OS4 (Accession NP_005721.2) is another GAM7957 target gene, herein designated TARGET GENE. OS4 BINDING SITE

is a target binding site found in the 3' untranslated region of mRNA encoded by OS4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of OS4 BINDING SITE, designated SEQ ID:18554, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57988] Another function of GAM7957 is therefore inhibition of OS4 (Accession NP_005721.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with OS4.

[57989] Orthodenticle homolog 3 (drosophila) (OTX3, Accession NP_671725.1) is another GAM7957 target gene, herein designated TARGET GENE. OTX3 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by OTX3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of OTX3 BINDING SITE, designated SEQ ID:12921, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57990] Another function of GAM7957 is therefore inhibition of Orthodenticle homolog 3 (drosophila) (OTX3, Accession NP_671725.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with OTX3.

[57991] Orthodenticle homolog 3 (drosophila) (OTX3, Accession NP_757379.1) is another GAM7957 target gene, herein designated TARGET GENE. OTX3 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by OTX3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of OTX3 BINDING SITE, designated SEQ ID:12921, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57992] Another function of GAM7957 is therefore inhibition of Orthodenticle homolog 3 (drosophila) (OTX3, Accession NP_757379.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with OTX3.

[57993] Purinergic receptor p2x, ligand-gated ion channel, 7 (P2RX7, Accession NP_002553.2) is another GAM7957

target gene, herein designated TARGET GENE. P2RX7 BINDING SITE1 and P2RX7 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by P2RX7, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of P2RX7 BINDING SITE1 and P2RX7 BINDING SITE2, designated SEQ ID:15480 and SEQ ID:11148 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57994] Another function of GAM7957 is therefore inhibition of Purinergic receptor p2x, ligand-gated ion channel, 7 (P2RX7, Accession NP_002553.2), a gene which responsible for atp- dependent lysis of macrophages and therefore may be associated with Chronic lymphatic leukemia. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Chronic lymphatic leukemia, and of other diseases and clinical conditions associated with P2RX7.

[57995] The function of P2RX7 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM72.1.Purinergic receptor p2x, ligand-gated ion channel, 7 (P2RX7, Accession NP_803176.1) is another GAM7957 target gene, herein designated TARGET GENE. P2RX7 BINDING SITE1 and P2RX7 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by P2RX7, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of P2RX7 BINDING SITE1 and P2RX7 BINDING SITE2, designated SEQ ID:15480 and SEQ ID:11148 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57996] Another function of GAM7957 is therefore inhibition of Purinergic receptor p2x, ligand-gated ion channel, 7 (P2RX7, Accession NP_803176.1), a gene which responsible for atp- dependent lysis of macrophages and therefore may be associated with Chronic lymphatic leukemia. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Chronic lymphatic leukemia, and of other diseases and clinical conditions associated with P2RX7.

[57997] The function of P2RX7 and its association with various

diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM72.1. Purinergic receptor p2y, g-protein coupled, 11 (P2RY11, Accession NP_002557.2) is another GAM7957 target gene, herein designated TARGET GENE. P2RY11 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by P2RY11, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of P2RY11 BINDING SITE, designated SEQ ID:11772, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[57998] Another function of GAM7957 is therefore inhibition of Purinergic receptor p2y, g-protein coupled, 11 (P2RY11, Accession NP_002557.2). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with P2RY11.

[57999] Poly(a) binding protein, nuclear 1 (PABPN1, Accession NP_004634.1) is another GAM7957 target gene, herein designated TARGET GENE. PABPN1 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by PABPN1, corresponding to a target

binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PABPN1 BINDING SITE, designated SEQ ID:18682, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58000] Another function of GAM7957 is therefore inhibition of Poly(a) binding protein, nuclear 1 (PABPN1, Accession NP_004634.1), a gene which binds to Poly(A) and therefore is associated with Oculopharyngeal muscular dystrophy. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Oculopharyngeal muscular dystrophy, and of other diseases and clinical conditions associated with PABPN1.

[58001] The function of PABPN1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM401.1.PAF53 (Accession NP_071935.1) is another GAM7957 target gene, herein designated TARGET GENE. PAF53 BINDING SITE1 and PAF53 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by PAF53, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III

of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PAF53 BINDING SITE1 and PAF53 BINDING SITE2, designated SEQ ID:1595 and SEQ ID:9204 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58002] Another function of GAM7957 is therefore inhibition of PAF53 (Accession NP_071935.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PAF53.

[58003] Platelet-activating factor acetylhydrolase 2, 40kda (PAFAH2, Accession NP_000428.2) is another GAM7957 target gene, herein designated TARGET GENE. PAFAH2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PAFAH2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PAFAH2 BINDING SITE, designated SEQ ID:17420, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58004] Another function of GAM7957 is therefore inhibition of Platelet-activating factor acetylhydrolase 2, 40kda

(PAFAH2, Accession NP_000428.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PAFAH2.

[58005] Phosphoribosylaminoimidazole carboxylase, phosphoribosylaminoimidazole succinocarboxamide synthetase (PAICS, Accession NP_006443.1) is another GAM7957 target gene, herein designated TARGET GENE. PAICS BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PAICS, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PAICS BINDING SITE, designated SEQ ID:16560, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58006] Another function of GAM7957 is therefore inhibition of Phosphoribosylaminoimidazole carboxylase, phosphoribosylaminoimidazole succinocarboxamide synthetase (PAICS, Accession NP_006443.1), a gene which is required for purine biosynthesis. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PAICS.

[58007] The function of PAICS and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM96.1. Protocadherin 11 x-linked (PCDH11X, Accession NP_116749.1) is another GAM7957 target gene, herein designated TARGET GENE. PCDH11X BINDING SITE1 and PCDH11X BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by PCDH11X, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PCDH11X BINDING SITE1 and PCDH11X BINDING SITE2, designated SEQ ID:4124 and SEQ ID:15343 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58008] Another function of GAM7957 is therefore inhibition of Protocadherin 11 x-linked (PCDH11X, Accession NP_116749.1), a gene which is thought to play a fundamental role in cell-cell recognition essential for the segmental development and function of the central nervous system. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical con-

ditions associated with PCDH11X.

[58009] The function of PCDH11X and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM347.2. Protocadherin 11 y-linked (PCDH11Y, Accession NP_116753.1) is another GAM7957 target gene, herein designated TARGET GENE. PCDH11Y BINDING SITE1 and PCDH11Y BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by PCDH11Y, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PCDH11Y BINDING SITE1 and PCDH11Y BINDING SITE2, designated SEQ ID:15343 and SEQ ID:15343 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58010] Another function of GAM7957 is therefore inhibition of Protocadherin 11 y-linked (PCDH11Y, Accession NP_116753.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PCDH11Y.

[58011] Protocadherin 11 y-linked (PCDH11Y, Accession

NP_116753.1) is another GAM7957 target gene, herein designated TARGET GENE. PCDH11Y BINDING SITE1 and PCDH11Y BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by PCDH11Y, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PCDH11Y BINDING SITE1 and PCDH11Y BINDING SITE2, designated SEQ ID:13155 and SEQ ID:13155 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58012] Another function of GAM7957 is therefore inhibition of Protocadherin 11 y-linked (PCDH11Y, Accession NP_116753.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PCDH11Y.

[58013] Protocadherin alpha 9 (PCDHA9, Accession NP_054724.1) is another GAM7957 target gene, herein designated TARGET GENE. PCDHA9 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PCDHA9, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or

BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PCDHA9 BINDING SITE, designated SEQ ID:3570, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58014] Another function of GAM7957 is therefore inhibition of Protocadherin alpha 9 (PCDHA9, Accession NP_054724.1), a gene which is a calcium- dependent cell- adhesion protein. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PCDHA9.

[58015] The function of PCDHA9 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1. Protocadherin beta 9 (PCDHB9, Accession NP_061992.2) is another GAM7957 target gene, herein designated TARGET GENE. PCDHB9 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PCDHB9, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PCDHB9 BINDING SITE, designated SEQ ID:5830, to the nucleotide sequence

of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58016] Another function of GAM7957 is therefore inhibition of Protocadherin beta 9 (PCDHB9, Accession NP_061992.2), a gene which is a potential calcium- dependent cell- adhesion protein. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PCDHB9.

[58017] The function of PCDHB9 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM72.1. Programmed cell death 7 (PDCD7, Accession NP_005698.1) is another GAM7957 target gene, herein designated TARGET GENE. PDCD7 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PDCD7, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PDCD7 BINDING SITE, designated SEQ ID:18337, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58018] Another function of GAM7957 is therefore inhibition of

Programmed cell death 7 (PDCD7, Accession NP_005698.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PDCD7.

[58019] Phosducin-like (PDCL, Accession NP_005379.2) is another GAM7957 target gene, herein designated TARGET GENE. PDCL BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PDCL, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PDCL BINDING SITE, designated SEQ ID:9532, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58020] Another function of GAM7957 is therefore inhibition of Phosducin-like (PDCL, Accession NP_005379.2), a gene which may regulate G- protein signaling and similar to phosducins. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PDCL.

[58021] The function of PDCL and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM30.1.Phosphodiesterase 4a, camp-specific (phosphodiesterase e2 dunce homolog, drosophila) (PDE4A, Accession NP_006193.1) is another GAM7957 target gene, herein designated TARGET GENE. PDE4A BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PDE4A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PDE4A BINDING SITE, designated SEQ ID:8124, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58022] Another function of GAM7957 is therefore inhibition of Phosphodiesterase 4a, camp-specific (phosphodiesterase e2 dunce homolog, drosophila) (PDE4A, Accession NP_006193.1), a gene which is a CAMP-specific phosphodiesterase. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PDE4A.

[58023] The function of PDE4A and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM197.1.Phosphodiesterase 4c, camp-specific

(phosphodiesterase e1 dunce homolog, drosophila) (PDE4C, Accession NP_000914.1) is another GAM7957 target gene, herein designated TARGET GENE. PDE4C BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PDE4C, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PDE4C BINDING SITE, designated SEQ ID:1567, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58024] Another function of GAM7957 is therefore inhibition of Phosphodiesterase 4c, camp-specific (phosphodiesterase e1 dunce homolog, drosophila) (PDE4C, Accession NP_000914.1), a gene which is a cAMP-specific phosphodiesterase and may be a protein involved in learning and memory. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PDE4C.

[58025] The function of PDE4C and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM65.1. Phosphodiesterase 7a (PDE7A, Accession

NP_002595.1) is another GAM7957 target gene, herein designated TARGET GENE. PDE7A BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PDE7A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PDE7A BINDING SITE, designated SEQ ID:17399, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58026] Another function of GAM7957 is therefore inhibition of Phosphodiesterase 7a (PDE7A, Accession NP_002595.1), a gene which is a CAMP-specific phosphodiesterase 7A and plays a role in signal transduction. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PDE7A.

[58027] The function of PDE7A and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM347.1.PECR (Accession NP_060911.2) is another GAM7957 target gene, herein designated TARGET GENE. PECCR BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PECCR, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PECCR BINDING SITE, designated SEQ ID:4310, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58028] Another function of GAM7957 is therefore inhibition of PECCR (Accession NP_060911.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PECCR.

[58029] PHAX (Accession NP_115553.1) is another GAM7957 target gene, herein designated TARGET GENE. PHAX BINDING SITE1 and PHAX BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by PHAX, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PHAX BINDING SITE1 and PHAX BINDING SITE2, designated SEQ ID:15984 and SEQ ID:4459 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58030] Another function of GAM7957 is therefore inhibition of PHAX (Accession NP_115553.1) . Accordingly, utilities of

GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PHAX.

[58031] Phosphorylase kinase, beta (PHKB, Accession NP_000284.1) is another GAM7957 target gene, herein designated TARGET GENE. PHKB BINDING SITE1 and PHKB BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by PHKB, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PHKB BINDING SITE1 and PHKB BINDING SITE2, designated SEQ ID:14137 and SEQ ID:12490 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58032] Another function of GAM7957 is therefore inhibition of Phosphorylase kinase, beta (PHKB, Accession NP_000284.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PHKB.

[58033] PIGO (Accession NP_690577.1) is another GAM7957 target gene, herein designated TARGET GENE. PIGO BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PIGO,

corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PIGO BINDING SITE, designated SEQ ID:5114, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58034] Another function of GAM7957 is therefore inhibition of PIGO (Accession NP_690577.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PIGO.

[58035] PIGO (Accession NP_116023.2) is another GAM7957 target gene, herein designated TARGET GENE. PIGO BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PIGO, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PIGO BINDING SITE, designated SEQ ID:5114, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58036] Another function of GAM7957 is therefore inhibition of PIGO (Accession NP_116023.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of

diseases and clinical conditions associated with PIGO.

[58037] Phosphatidylinositol-4-phosphate 5-kinase, type ii, beta (PIP5K2B, Accession NP_619632.1) is another GAM7957 target gene, herein designated TARGET GENE. PIP5K2B BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PIP5K2B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PIP5K2B BINDING SITE, designated SEQ ID:3903, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58038] Another function of GAM7957 is therefore inhibition of Phosphatidylinositol-4-phosphate 5-kinase, type ii, beta (PIP5K2B, Accession NP_619632.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PIP5K2B.

[58039] Piwi-like 2 (drosophila) (PIWIL2, Accession NP_060538.2) is another GAM7957 target gene, herein designated TARGET GENE. PIWIL2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by

PIWIL2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PIWIL2 BINDING SITE, designated SEQ ID:9765, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58040] Another function of GAM7957 is therefore inhibition of Piwi-like 2 (drosophila) (PIWIL2, Accession NP_060538.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PIWIL2.

[58041] Phospholipase a2, group iid (PLA2G2D, Accession NP_036532.1) is another GAM7957 target gene, herein designated TARGET GENE. PLA2G2D BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PLA2G2D, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PLA2G2D BINDING SITE, designated SEQ ID:15631, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58042] Another function of GAM7957 is therefore inhibition of Phospholipase a2, group iId (PLA2G2D, Accession NP_036532.1), a gene which is involved in phospholipid digestion, remodeling of cell membranes, and host defense, as well as pathophysiologic processes. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PLA2G2D.

[58043] The function of PLA2G2D and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM72.1. Pleckstrin homology domain containing, family b (eVectins) member 2 (PLEKHB2, Accession NP_060428.1) is another GAM7957 target gene, herein designated TARGET GENE. PLEKHB2 BINDING SITE1 and PLEKHB2 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by PLEKHB2, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PLEKHB2 BINDING SITE1 and PLEKHB2 BINDING SITE2, designated SEQ ID:8068 and SEQ ID:15340 respectively, to the nucleotide sequence of GAM7957 RNA, herein design-

nated GAM RNA, also designated SEQ ID:297.

[58044] Another function of GAM7957 is therefore inhibition of Pleckstrin homology domain containing, family b (evectins) member 2 (PLEKHB2, Accession NP_060428.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PLEKHB2.

[58045] Polo-like kinase (drosophila) (PLK, Accession NP_005021.2) is another GAM7957 target gene, herein designated TARGET GENE. PLK BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by PLK, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PLK BINDING SITE, designated SEQ ID:1508, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58046] Another function of GAM7957 is therefore inhibition of Polo-like kinase (drosophila) (PLK, Accession NP_005021.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PLK.

[58047] PLPL (Accession NP_064566.1) is another GAM7957 target gene, herein designated TARGET GENE. PLPL BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PLPL, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PLPL BINDING SITE, designated SEQ ID:699, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58048] Another function of GAM7957 is therefore inhibition of PLPL (Accession NP_064566.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PLPL.

[58049] PNPLA1 (Accession NP_775947.1) is another GAM7957 target gene, herein designated TARGET GENE. PNPLA1 BINDING SITE1 and PNPLA1 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by PNPLA1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PNPLA1 BINDING SITE1 and PNPLA1 BINDING SITE2, designated SEQ ID:1493 and SEQ

ID:18749 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58050] Another function of GAM7957 is therefore inhibition of PNPLA1 (Accession NP_775947.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PNPLA1.

[58051] Podocalyxin-like (PODXL, Accession NP_005388.1) is another GAM7957 target gene, herein designated TARGET GENE. PODXL BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PODXL, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PODXL BINDING SITE, designated SEQ ID:19168, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58052] Another function of GAM7957 is therefore inhibition of Podocalyxin-like (PODXL, Accession NP_005388.1), a gene which is an antiadhesin. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PODXL.

[58053] The function of PODXL and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM335.1. Protein o-fucosyltransferase 1 (POFUT1, Accession NP_056167.1) is another GAM7957 target gene, herein designated TARGET GENE. POFUT1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by POFUT1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of POFUT1 BINDING SITE, designated SEQ ID:17423, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58054] Another function of GAM7957 is therefore inhibition of Protein o-fucosyltransferase 1 (POFUT1, Accession NP_056167.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with POFUT1.

[58055] POLA2 (Accession NP_002680.2) is another GAM7957 target gene, herein designated TARGET GENE. POLA2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by POLA2, corresponding

to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of POLA2 BINDING SITE, designated SEQ ID:3957, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58056] Another function of GAM7957 is therefore inhibition of POLA2 (Accession NP_002680.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with POLA2.

[58057] Polymerase (dna directed), eta (POLH, Accession NP_006493.1) is another GAM7957 target gene, herein designated TARGET GENE. POLH BINDING SITE1 through POLH BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by POLH, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of POLH BINDING SITE1 through POLH BINDING SITE3, designated SEQ ID:6653, SEQ ID:8681 and SEQ ID:10896 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58058] Another function of GAM7957 is therefore inhibition of

Polymerase (dna directed), eta (POLH, Accession NP_006493.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with POLH.

[58059] POLR1B (Accession NP_061887.1) is another GAM7957 target gene, herein designated TARGET GENE. POLR1B BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by POLR1B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of POLR1B BINDING SITE, designated SEQ ID:732, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58060] Another function of GAM7957 is therefore inhibition of POLR1B (Accession NP_061887.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with POLR1B.

[58061] Peroxisome proliferative activated receptor, delta (PPARD, Accession NP_006229.1) is another GAM7957 target gene, herein designated TARGET GENE. PPARD BINDING SITE1 and PPARD BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA

encoded by PPARD, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PPARD BINDING SITE1 and PPARD BINDING SITE2, designated SEQ ID:8364 and SEQ ID:1622 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

- [58062] Another function of GAM7957 is therefore inhibition of Peroxisome proliferative activated receptor, delta (PPARD, Accession NP_006229.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PPARD.
- [58063] Protein phosphatase 1f (pp2c domain containing) (PPM1F, Accession NP_055449.1) is another GAM7957 target gene, herein designated TARGET GENE. PPM1F BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PPM1F, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PPM1F BINDING SITE, designated SEQ ID:2607, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also design-

nated SEQ ID:297.

[58064] Another function of GAM7957 is therefore inhibition of Protein phosphatase 1f (pp2c domain containing) (PPM1F, Accession NP_055449.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PPM1F.

[58065] Protein phosphatase 1, regulatory (inhibitor) subunit 12b (PPP1R12B, Accession NP_002472.1) is another GAM7957 target gene, herein designated TARGET GENE. PPP1R12B BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PPP1R12B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PPP1R12B BINDING SITE, designated SEQ ID:8779, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58066] Another function of GAM7957 is therefore inhibition of Protein phosphatase 1, regulatory (inhibitor) subunit 12b (PPP1R12B, Accession NP_002472.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

PPP1R12B.

[58067] Protein phosphatase 1, regulatory (inhibitor) subunit 12b (PPP1R12B, Accession NP_115288.1) is another GAM7957 target gene, herein designated TARGET GENE. PPP1R12B BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PPP1R12B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PPP1R12B BINDING SITE, designated SEQ ID:8779, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58068] Another function of GAM7957 is therefore inhibition of Protein phosphatase 1, regulatory (inhibitor) subunit 12b (PPP1R12B, Accession NP_115288.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PPP1R12B.

[58069] Protein phosphatase 1, regulatory (inhibitor) subunit 3b (PPP1R3B, Accession NP_078883.1) is another GAM7957 target gene, herein designated TARGET GENE. PPP1R3B BINDING SITE1 and PPP1R3B BINDING SITE2 are target

binding sites found in untranslated regions of mRNA encoded by PPP1R3B, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PPP1R3B BINDING SITE1 and PPP1R3B BINDING SITE2, designated SEQ ID:15984 and SEQ ID:1492 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58070] Another function of GAM7957 is therefore inhibition of Protein phosphatase 1, regulatory (inhibitor) subunit 3b (PPP1R3B, Accession NP_078883.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PPP1R3B.

[58071] Protein phosphatase 2 (formerly 2a), regulatory subunit a (pr 65), beta isoform (PPP2R1B, Accession NP_002707.2) is another GAM7957 target gene, herein designated TARGET GENE. PPP2R1B BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PPP2R1B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of PPP2R1B BINDING SITE, designated SEQ ID:9028, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58072] Another function of GAM7957 is therefore inhibition of Protein phosphatase 2 (formerly 2a), regulatory subunit a (pr 65), beta isoform (PPP2R1B, Accession NP_002707.2), a gene which is necessary for interaction of the catalytic PP2A- C and variable PP2A- B subunits. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PPP2R1B.

[58073] The function of PPP2R1B and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM94.1. Polyglutamine binding protein 1 (PQBP1, Accession NP_005701.1) is another GAM7957 target gene, herein designated TARGET GENE. PQBP1 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by PQBP1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PQBP1 BINDING SITE,

designated SEQ ID:15439, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58074] Another function of GAM7957 is therefore inhibition of Polyglutamine binding protein 1 (PQBP1, Accession NP_005701.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PQBP1.

[58075] Pr domain containing 14 (PRDM14, Accession NP_078780.1) is another GAM7957 target gene, herein designated TARGET GENE. PRDM14 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PRDM14, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PRDM14 BINDING SITE, designated SEQ ID:13304, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58076] Another function of GAM7957 is therefore inhibition of Pr domain containing 14 (PRDM14, Accession NP_078780.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical condi-

tions associated with PRDM14.

[58077] PRIC285 (Accession NP_208384.1) is another GAM7957 target gene, herein designated TARGET GENE. PRIC285 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PRIC285, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PRIC285 BINDING SITE, designated SEQ ID:13230, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58078] Another function of GAM7957 is therefore inhibition of PRIC285 (Accession NP_208384.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PRIC285.

[58079] Protein kinase, x-linked (PRKX, Accession NP_005035.1) is another GAM7957 target gene, herein designated TARGET GENE. PRKX BINDING SITE1 and PRKX BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by PRKX, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of

the nucleotide sequences of PRKX BINDING SITE1 and PRKX BINDING SITE2, designated SEQ ID:5830 and SEQ ID:13758 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58080] Another function of GAM7957 is therefore inhibition of Protein kinase, x-linked (PRKX, Accession NP_005035.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PRKX.

[58081] Protein kinase, y-linked (PRKY, Accession NP_002751.1) is another GAM7957 target gene, herein designated TARGET GENE. PRKY BINDING SITE1 and PRKY BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by PRKY, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PRKY BINDING SITE1 and PRKY BINDING SITE2, designated SEQ ID:5494 and SEQ ID:1053 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58082] Another function of GAM7957 is therefore inhibition of

Protein kinase, γ -linked (PRKY, Accession NP_002751.1), a gene which is a putative protein kinase. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PRKY.

[58083] The function of PRKY and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM72.1.PRO0255 (Accession NP_054843.1) is another GAM7957 target gene, herein designated TARGET GENE. PRO0255 BINDING SITE1 and PRO0255 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by PRO0255, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PRO0255 BINDING SITE1 and PRO0255 BINDING SITE2, designated SEQ ID:5830 and SEQ ID:18286 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58084] Another function of GAM7957 is therefore inhibition of PRO0255 (Accession NP_054843.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment

of diseases and clinical conditions associated with PRO0255.

[58085] PRO0478 (Accession NP_054848.1) is another GAM7957 target gene, herein designated TARGET GENE. PRO0478 BINDING SITE1 through PRO0478 BINDING SITE5 are target binding sites found in untranslated regions of mRNA encoded by PRO0478, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PRO0478 BINDING SITE1 through PRO0478 BINDING SITE5, designated SEQ ID:12922, SEQ ID:12098, SEQ ID:1171, SEQ ID:3871 and SEQ ID:5635 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58086] Another function of GAM7957 is therefore inhibition of PRO0478 (Accession NP_054848.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PRO0478.

[58087] PRO0483 (Accession NP_054849.1) is another GAM7957 target gene, herein designated TARGET GENE. PRO0483 BINDING SITE1 and PRO0483 BINDING SITE2 are target binding sites found in untranslated regions of mRNA en-

coded by PRO0483, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PRO0483 BINDING SITE1 and PRO0483 BINDING SITE2, designated SEQ ID:8189 and SEQ ID:4309 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58088] Another function of GAM7957 is therefore inhibition of PRO0483 (Accession NP_054849.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PRO0483.

[58089] PRO0618 (Accession NP_054852.1) is another GAM7957 target gene, herein designated TARGET GENE. PRO0618 BINDING SITE1 and PRO0618 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by PRO0618, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PRO0618 BINDING SITE1 and PRO0618 BINDING SITE2, designated SEQ ID:12796 and SEQ ID:5830 respectively, to the nucleotide sequence of

GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58090] Another function of GAM7957 is therefore inhibition of PRO0618 (Accession NP_054852.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PRO0618.

[58091] PRO1048 (Accession NP_060967.1) is another GAM7957 target gene, herein designated TARGET GENE. PRO1048 BINDING SITE1 through PRO1048 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by PRO1048, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PRO1048 BINDING SITE1 through PRO1048 BINDING SITE3, designated SEQ ID:11467, SEQ ID:7048 and SEQ ID:12433 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58092] Another function of GAM7957 is therefore inhibition of PRO1048 (Accession NP_060967.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

PRO1048.

[58093] PRO1496 (Accession NP_061073.1) is another GAM7957 target gene, herein designated TARGET GENE. PRO1496 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PRO1496, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PRO1496 BINDING SITE, designated SEQ ID:4729, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58094] Another function of GAM7957 is therefore inhibition of PRO1496 (Accession NP_061073.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PRO1496.

[58095] PRO2015 (Accession NP_060982.1) is another GAM7957 target gene, herein designated TARGET GENE. PRO2015 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PRO2015, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

PRO2015 BINDING SITE, designated SEQ ID:18687, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58096] Another function of GAM7957 is therefore inhibition of PRO2015 (Accession NP_060982.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PRO2015.

[58097] PRO2198 (Accession NP_061091.1) is another GAM7957 target gene, herein designated TARGET GENE. PRO2198 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by PRO2198, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PRO2198 BINDING SITE, designated SEQ ID:8909, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58098] Another function of GAM7957 is therefore inhibition of PRO2198 (Accession NP_061091.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PRO2198.

[58099] PRO2730 (Accession NP_079498.1) is another GAM7957 target gene, herein designated TARGET GENE. PRO2730 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PRO2730, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PRO2730 BINDING SITE, designated SEQ ID:17419, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58100] Another function of GAM7957 is therefore inhibition of PRO2730 (Accession NP_079498.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PRO2730.

[58101] PRO2964 (Accession NP_061017.1) is another GAM7957 target gene, herein designated TARGET GENE. PRO2964 BINDING SITE1 and PRO2964 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by PRO2964, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PRO2964 BINDING SITE1 and

PRO2964 BINDING SITE2, designated SEQ ID:15343 and SEQ ID:13155 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58102] Another function of GAM7957 is therefore inhibition of PRO2964 (Accession NP_061017.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PRO2964.

[58103] Prp4 pre-mrna processing factor 4 homolog (yeast) (PRPF4, Accession NP_004688.2) is another GAM7957 target gene, herein designated TARGET GENE. PRPF4 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PRPF4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PRPF4 BINDING SITE, designated SEQ ID:3935, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58104] Another function of GAM7957 is therefore inhibition of Prp4 pre-mrna processing factor 4 homolog (yeast) (PRPF4, Accession NP_004688.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PRPF4.

[58105] Periaxin (PRX, Accession NP_066007.1) is another GAM7957 target gene, herein designated TARGET GENE. PRX BINDING SITE1 and PRX BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by PRX, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PRX BINDING SITE1 and PRX BINDING SITE2, designated SEQ ID:14564 and SEQ ID:6121 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58106] Another function of GAM7957 is therefore inhibition of Periaxin (PRX, Accession NP_066007.1), a gene which seems to be required for maintenance of peripheral nerve myelin sheath. may have a role in axon- glial interactions, possibly by interacting with the cytoplasmic domains of integral membrane proteins such as myelin- associated glycoprotein in the periaxonal regions of the schwann cell

plasma membrane. may have a role in the early phases of myelin deposition and therefore is associated with Dejerine–sottas neuropathy, autosomal recessive. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Dejerine–sottas neuropathy, autosomal recessive, and of other diseases and clinical conditions associated with PRX.

[58107] The function of PRX and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1. Pleckstrin homology, sec7 and coiled/coil domains 3 (PSCD3, Accession NP_004218.1) is another GAM7957 target gene, herein designated TARGET GENE. PSCD3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PSCD3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PSCD3 BINDING SITE, designated SEQ ID:1543, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58108] Another function of GAM7957 is therefore inhibition of Pleckstrin homology, sec7 and coiled/coil domains 3

(PSCD3, Accession NP_004218.1), a gene which regulates vesicle trafficking in eukaryotic cells. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PSCD3.

[58109] The function of PSCD3 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM650.2.PSK (Accession NP_057235.1) is another GAM7957 target gene, herein designated TARGET GENE. PSK BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by PSK, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PSK BINDING SITE, designated SEQ ID:2797, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58110] Another function of GAM7957 is therefore inhibition of PSK (Accession NP_057235.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PSK.

[58111] Proteasome (prosome, macropain) 26s subunit, non-atpase, 5 (PSMD5, Accession NP_005038.1) is another

GAM7957 target gene, herein designated TARGET GENE. PSMD5 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PSMD5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PSMD5 BINDING SITE, designated SEQ ID:2976, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58112] Another function of GAM7957 is therefore inhibition of Proteasome (prosome, macropain) 26s subunit, non-atpase, 5 (PSMD5, Accession NP_005038.1), a gene which is the non-ATPase subunit 5 of the 26S proteasome (prosome macropain). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PSMD5.

[58113] The function of PSMD5 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM190.1. Platelet-activating factor receptor (PTAFR, Accession NP_000943.1) is another GAM7957 target gene, herein designated TARGET GENE. PTAFR BINDING SITE is a target binding site found in the 3' untranslated region of

mRNA encoded by PTAFR, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PTAFR BINDING SITE, designated SEQ ID:18066, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58114] Another function of GAM7957 is therefore inhibition of Platelet-activating factor receptor (PTAFR, Accession NP_000943.1), a gene which is a platelet- activating factor receptor. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PTAFR.

[58115] The function of PTAFR and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM347.1. Prostaglandin i2 (prostacyclin) synthase (PTGIS, Accession NP_000952.1) is another GAM7957 target gene, herein designated TARGET GENE. PTGIS BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PTGIS, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the com-

plementarity of the nucleotide sequences of PTGIS BINDING SITE, designated SEQ ID:7315, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

- [58116] Another function of GAM7957 is therefore inhibition of Prostaglandin i2 (prostacyclin) synthase (PTGIS, Accession NP_000952.1), a gene which catalyzes the isomerization of prostaglandin h2 to prostacyclin (= prostaglandin i2). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PTGIS.
- [58117] The function of PTGIS and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1. Prostaglandin-endoperoxide synthase 1 (prostaglandin g/h synthase and cyclooxygenase) (PTGS1, Accession NP_542158.1) is another GAM7957 target gene, herein designated TARGET GENE. PTGS1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PTGS1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

PTGS1 BINDING SITE, designated SEQ ID:12185, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58118] Another function of GAM7957 is therefore inhibition of Prostaglandin-endoperoxide synthase 1 (prostaglandin g/h synthase and cyclooxygenase) (PTGS1, Accession NP_542158.1), a gene which may play an important role in regulating or promoting cell proliferation in some normal and neoplastically transformed cells. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PTGS1.

[58119] The function of PTGS1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM40.1. Prostaglandin-endoperoxide synthase 1 (prostaglandin g/h synthase and cyclooxygenase) (PTGS1, Accession NP_000953.2) is another GAM7957 target gene, herein designated TARGET GENE. PTGS1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PTGS1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

PTGS1 BINDING SITE, designated SEQ ID:12185, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58120] Another function of GAM7957 is therefore inhibition of Prostaglandin-endoperoxide synthase 1 (prostaglandin g/h synthase and cyclooxygenase) (PTGS1, Accession NP_000953.2), a gene which may play an important role in regulating or promoting cell proliferation in some normal and neoplastically transformed cells. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PTGS1.

[58121] The function of PTGS1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM40.1. Ptk6 protein tyrosine kinase 6 (PTK6, Accession NP_005966.1) is another GAM7957 target gene, herein designated TARGET GENE. PTK6 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PTK6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PTK6 BINDING SITE, designated SEQ ID:15675, to the nucleotide sequence of

GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58122] Another function of GAM7957 is therefore inhibition of Ptk6 protein tyrosine kinase 6 (PTK6, Accession NP_005966.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PTK6.

[58123] Polymerase i and transcript release factor (PTRF, Accession NP_036364.1) is another GAM7957 target gene, herein designated TARGET GENE. PTRF BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PTRF, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PTRF BINDING SITE, designated SEQ ID:11379, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58124] Another function of GAM7957 is therefore inhibition of Polymerase i and transcript release factor (PTRF, Accession NP_036364.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PTRF.

[58125] QRSL1 (Accession NP_060762.2) is another GAM7957 target gene, herein designated TARGET GENE. QRSL1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by QRSL1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of QRSL1 BINDING SITE, designated SEQ ID:17699, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58126] Another function of GAM7957 is therefore inhibition of QRSL1 (Accession NP_060762.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with QRSL1.

[58127] Rab3d, member ras oncogene family (RAB3D, Accession NP_004274.1) is another GAM7957 target gene, herein designated TARGET GENE. RAB3D BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RAB3D, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RAB3D BINDING SITE, designated SEQ ID:19319, to the nucleotide sequence of GAM7957

RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58128] Another function of GAM7957 is therefore inhibition of Rab3d, member ras oncogene family (RAB3D, Accession NP_004274.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RAB3D.

[58129] Rab4b, member ras oncogene family (RAB4B, Accession NP_057238.2) is another GAM7957 target gene, herein designated TARGET GENE. RAB4B BINDING SITE1 and RAB4B BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by RAB4B, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RAB4B BINDING SITE1 and RAB4B BINDING SITE2, designated SEQ ID:15221 and SEQ ID:15089 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58130] Another function of GAM7957 is therefore inhibition of Rab4b, member ras oncogene family (RAB4B, Accession NP_057238.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical

cal conditions associated with RAB4B.

[58131] Rab5b, member ras oncogene family (RAB5B, Accession NP_002859.1) is another GAM7957 target gene, herein designated TARGET GENE. RAB5B BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RAB5B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RAB5B BINDING SITE, designated SEQ ID:14174, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58132] Another function of GAM7957 is therefore inhibition of Rab5b, member ras oncogene family (RAB5B, Accession NP_002859.1), a gene which is presumably involved in vesicular trafficking at the plasma membrane. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RAB5B.

[58133] The function of RAB5B and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM408.1.Rab7, member ras oncogene family-like 1

(RAB7L1, Accession NP_003920.1) is another GAM7957 target gene, herein designated TARGET GENE. RAB7L1 BINDING SITE1 and RAB7L1 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by RAB7L1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RAB7L1 BINDING SITE1 and RAB7L1 BINDING SITE2, designated SEQ ID:2925 and SEQ ID:16970 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58134] Another function of GAM7957 is therefore inhibition of Rab7, member ras oncogene family-like 1 (RAB7L1, Accession NP_003920.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RAB7L1.

[58135] Rab9b, member ras oncogene family (RAB9B, Accession NP_057454.1) is another GAM7957 target gene, herein designated TARGET GENE. RAB9B BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by RAB9B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III

of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RAB9B BINDING SITE, designated SEQ ID:20013, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58136] Another function of GAM7957 is therefore inhibition of Rab9b, member ras oncogene family (RAB9B, Accession NP_057454.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RAB9B.

[58137] Rad1 homolog (s. pombe) (RAD1, Accession NP_002844.1) is another GAM7957 target gene, herein designated TARGET GENE. RAD1 BINDING SITE1 and RAD1 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by RAD1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RAD1 BINDING SITE1 and RAD1 BINDING SITE2, designated SEQ ID:19050 and SEQ ID:19050 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58138] Another function of GAM7957 is therefore inhibition of

Rad1 homolog (s. pombe) (RAD1, Accession NP_002844.1), a gene which has important roles in DNA damage- activated mitotic and meiotic cell cycle check-points. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RAD1.

[58139] The function of RAD1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM39.1. Rad1 homolog (s. pombe) (RAD1, Accession NP_596868.1) is another GAM7957 target gene, herein designated TARGET GENE. RAD1 BINDING SITE1 and RAD1 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by RAD1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RAD1 BINDING SITE1 and RAD1 BINDING SITE2, designated SEQ ID:20138 and SEQ ID:19050 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58140] Another function of GAM7957 is therefore inhibition of

Rad1 homolog (s. pombe) (RAD1, Accession NP_596868.1), a gene which has important roles in DNA damage- activated mitotic and meiotic cell cycle check-points. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RAD1.

[58141] The function of RAD1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM39.1. Rad1 homolog (s. pombe) (RAD1, Accession NP_579816.1) is another GAM7957 target gene, herein designated TARGET GENE. RAD1 BINDING SITE1 and RAD1 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by RAD1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RAD1 BINDING SITE1 and RAD1 BINDING SITE2, designated SEQ ID:20138 and SEQ ID:20138 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58142] Another function of GAM7957 is therefore inhibition of

Rad1 homolog (*s. pombe*) (RAD1, Accession NP_579816.1), a gene which has important roles in DNA damage- activated mitotic and meiotic cell cycle check-points. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RAD1.

[58143] The function of RAD1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM39.1. Rad51 homolog (*reca* homolog, *e. coli*) (*s. cerevisiae*) (RAD51, Accession NP_002866.2) is another GAM7957 target gene, herein designated TARGET GENE. RAD51 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by RAD51, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RAD51 BINDING SITE, designated SEQ ID:3609, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58144] Another function of GAM7957 is therefore inhibition of Rad51 homolog (*reca* homolog, *e. coli*) (*s. cerevisiae*)

(RAD51, Accession NP_002866.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RAD51.

[58145] Rad51 homolog (reca homolog, e. coli) (s. cerevisiae) (RAD51, Accession NP_597994.1) is another GAM7957 target gene, herein designated TARGET GENE. RAD51 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by RAD51, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RAD51 BINDING SITE, designated SEQ ID:3609, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58146] Another function of GAM7957 is therefore inhibition of Rad51 homolog (reca homolog, e. coli) (s. cerevisiae) (RAD51, Accession NP_597994.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RAD51.

[58147] Retinoblastoma binding protein 5 (RBBP5, Accession NP_005048.1) is another GAM7957 target gene, herein designated TARGET GENE. RBBP5 BINDING SITE is a target

binding site found in the 3' untranslated region of mRNA encoded by RBBP5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RBBP5 BINDING SITE, designated SEQ ID:6786, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58148] Another function of GAM7957 is therefore inhibition of Retinoblastoma binding protein 5 (RBBP5, Accession NP_005048.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RBBP5.

[58149] Retinoblastoma-like 1 (p107) (RBL1, Accession NP_002886.1) is another GAM7957 target gene, herein designated TARGET GENE. RBL1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RBL1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RBL1 BINDING SITE, designated SEQ ID:19648, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ

ID:297.

[58150] Another function of GAM7957 is therefore inhibition of Retinoblastoma-like 1 (p107) (RBL1, Accession NP_002886.1), a gene which has an important role in negatively regulating the rate of progression of the cell cycle. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RBL1.

[58151] The function of RBL1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM72.1. Rna binding motif protein 10 (RBM10, Accession NP_690595.1) is another GAM7957 target gene, herein designated TARGET GENE. RBM10 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by RBM10, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RBM10 BINDING SITE, designated SEQ ID:14218, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58152] Another function of GAM7957 is therefore inhibition of

Rna binding motif protein 10 (RBM10, Accession NP_690595.1), a gene which has RNA- binding activity. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RBM10.

[58153] The function of RBM10 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM234.1. Rna binding motif protein 10 (RBM10, Accession NP_005667.2) is another GAM7957 target gene, herein designated TARGET GENE. RBM10 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by RBM10, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RBM10 BINDING SITE, designated SEQ ID:14218, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58154] Another function of GAM7957 is therefore inhibition of Rna binding motif protein 10 (RBM10, Accession NP_005667.2), a gene which has RNA- binding activity. Accordingly, utilities of GAM7957 include diagnosis, pre-

vention and treatment of diseases and clinical conditions associated with RBM10.

[58155] The function of RBM10 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM234.1. Rna binding motif protein 3 (RBM3, Accession NP_006734.1) is another GAM7957 target gene, herein designated TARGET GENE. RBM3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RBM3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RBM3 BINDING SITE, designated SEQ ID:14780, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58156] Another function of GAM7957 is therefore inhibition of Rna binding motif protein 3 (RBM3, Accession NP_006734.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RBM3.

[58157] Reticulocalbin 1, ef-hand calcium binding domain (RCN1, Accession NP_002892.1) is another GAM7957 target gene,

herein designated TARGET GENE. RCN1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RCN1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RCN1 BINDING SITE, designated SEQ ID:904, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58158] Another function of GAM7957 is therefore inhibition of Reticulocalbin 1, ef-hand calcium binding domain (RCN1, Accession NP_002892.1), a gene which may regulate calcium-dependent activities in the ER lumen or post-ER compartment. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RCN1.

[58159] The function of RCN1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM767.1.RDC1 (Accession XP_051522.2) is another GAM7957 target gene, herein designated TARGET GENE. RDC1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA en-

coded by RDC1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RDC1 BINDING SITE, designated SEQ ID:15888, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58160] Another function of GAM7957 is therefore inhibition of RDC1 (Accession XP_051522.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RDC1.

[58161] RDC1 (Accession NP_064707.1) is another GAM7957 target gene, herein designated TARGET GENE. RDC1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by RDC1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RDC1 BINDING SITE, designated SEQ ID:15888, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58162] Another function of GAM7957 is therefore inhibition of RDC1 (Accession NP_064707.1) . Accordingly, utilities of

GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RDC1.

[58163] Arginine–glutamic acid dipeptide (re) repeats (RERE, Accession NP_036234.2) is another GAM7957 target gene, herein designated TARGET GENE. RERE BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RERE, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RERE BINDING SITE, designated SEQ ID:9174, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58164] Another function of GAM7957 is therefore inhibition of Arginine–glutamic acid dipeptide (re) repeats (RERE, Accession NP_036234.2), a gene which binds DRPLA and locates in the nucleus and therefore may be associated with Dentatorubral– pallidoluysian atrophy. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Dentatorubral– pallidoluysian atrophy, and of other diseases and clinical conditions associated with RERE.

[58165] The function of RERE and its association with various dis–

eases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM47.1. Ret proto-oncogene (multiple endocrine neoplasia and medullary thyroid carcinoma 1, hirschsprung disease) (RET, Accession NP_065681.1) is another GAM7957 target gene, herein designated TARGET GENE. RET BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by RET, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RET BINDING SITE, designated SEQ ID:17434, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58166] Another function of GAM7957 is therefore inhibition of Ret proto-oncogene (multiple endocrine neoplasia and medullary thyroid carcinoma 1, hirschsprung disease) (RET, Accession NP_065681.1), a gene which transduces signals for cell growth and differentiation. and therefore may be associated with Multiple endocrine neoplasia. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Multiple endocrine neoplasia, and of other diseases and clinical conditions associated with RET.

[58167] The function of RET and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM47.1.Rev3-like, catalytic subunit of dna polymerase zeta (yeast) (REV3L, Accession NP_002903.1) is another GAM7957 target gene, herein designated TARGET GENE. REV3L BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by REV3L, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of REV3L BINDING SITE, designated SEQ ID:6680, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58168] Another function of GAM7957 is therefore inhibition of Rev3-like, catalytic subunit of dna polymerase zeta (yeast) (REV3L, Accession NP_002903.1), a gene which is a catalytic subunit of DNA polymerase zeta and acts in translation replication and mutagenesis. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with REV3L.

[58169] The function of REV3L and its association with various diseases and clinical conditions, has been established by

previous studies, as described hereinabove with reference to GAM275.1. Replication factor c (activator 1) 2, 40kda (RFC2, Accession NP_852136.1) is another GAM7957 target gene, herein designated TARGET GENE. RFC2 BINDING SITE1 and RFC2 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by RFC2, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RFC2 BINDING SITE1 and RFC2 BINDING SITE2, designated SEQ ID:9763 and SEQ ID:9763 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58170] Another function of GAM7957 is therefore inhibition of Replication factor c (activator 1) 2, 40kda (RFC2, Accession NP_852136.1), a gene which is needed for the elongation of primed dna templates by dna polymerase and therefore may be associated with Williams– beuren syndrome. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Williams– beuren syndrome, and of other diseases and clinical conditions associated with RFC2.

[58171] The function of RFC2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM257.1. Replication factor c (activator 1) 2, 40kda (RFC2, Accession NP_002905.2) is another GAM7957 target gene, herein designated TARGET GENE. RFC2 BINDING SITE1 and RFC2 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by RFC2, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RFC2 BINDING SITE1 and RFC2 BINDING SITE2, designated SEQ ID:9778 and SEQ ID:9778 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58172] Another function of GAM7957 is therefore inhibition of Replication factor c (activator 1) 2, 40kda (RFC2, Accession NP_002905.2), a gene which is needed for the elongation of primed dna templates by dna polymerase and therefore may be associated with Williams- beuren syndrome. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Williams- beuren syn-

drome, and of other diseases and clinical conditions associated with RFC2.

[58173] The function of RFC2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM257.1.RGSL2 (Accession NP_115643.1) is another GAM7957 target gene, herein designated TARGET GENE. RGSL2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RGSL2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RGSL2 BINDING SITE, designated SEQ ID:15343, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58174] Another function of GAM7957 is therefore inhibition of RGSL2 (Accession NP_115643.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RGSL2.

[58175] RHO6 (Accession NP_055285.1) is another GAM7957 target gene, herein designated TARGET GENE. RHO6 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by RHO6, corresponding to a

target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RHO6 BINDING SITE, designated SEQ ID:1080, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58176] Another function of GAM7957 is therefore inhibition of RHO6 (Accession NP_055285.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RHO6.

[58177] Rho-related btb domain containing 3 (RHOBTB3, Accession NP_055714.1) is another GAM7957 target gene, herein designated TARGET GENE. RHOBTB3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RHOBTB3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RHOBTB3 BINDING SITE, designated SEQ ID:18151, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58178] Another function of GAM7957 is therefore inhibition of Rho-related btb domain containing 3 (RHOBTB3, Acces-

sion NP_055714.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RHOBTB3.

[58179] Regulating synaptic membrane exocytosis 1 (RIMS1, Accession NP_055804.1) is another GAM7957 target gene, herein designated TARGET GENE. RIMS1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RIMS1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RIMS1 BINDING SITE, designated SEQ ID:10435, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58180] Another function of GAM7957 is therefore inhibition of Regulating synaptic membrane exocytosis 1 (RIMS1, Accession NP_055804.1), a gene which may have a regulatory role in the membrane interactions during trafficking of synaptic vesicles. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RIMS1.

[58181] The function of RIMS1 and its association with various diseases and clinical conditions, has been established by

previous studies, as described hereinabove with reference to GAM264.1.RNF125 (Accession NP_060301.1) is another GAM7957 target gene, herein designated TARGET GENE. RNF125 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RNF125, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RNF125 BINDING SITE, designated SEQ ID:11101, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58182] Another function of GAM7957 is therefore inhibition of RNF125 (Accession NP_060301.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RNF125.

[58183] Rho-associated, coiled-coil containing protein kinase 2 (ROCK2, Accession NP_004841.1) is another GAM7957 target gene, herein designated TARGET GENE. ROCK2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ROCK2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of ROCK2 BINDING SITE, designated SEQ ID:9205, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58184] Another function of GAM7957 is therefore inhibition of Rho-associated, coiled-coil containing protein kinase 2 (ROCK2, Accession NP_004841.1), a gene which regulates cytokinesis, smooth muscle contraction, the formation of actin stress fibers and focal adhesions. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ROCK2.

[58185] The function of ROCK2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM90.1.RoXaN (Accession NP_060060.3) is another GAM7957 target gene, herein designated TARGET GENE. RoXaN BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RoXaN, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RoXaN BINDING SITE, designated SEQ ID:9947, to the

nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58186] Another function of GAM7957 is therefore inhibition of RoXaN (Accession NP_060060.3) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RoXaN.

[58187] Ribophorin i (RPN1, Accession NP_002941.1) is another GAM7957 target gene, herein designated TARGET GENE. RPN1 BINDING SITE1 and RPN1 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by RPN1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RPN1 BINDING SITE1 and RPN1 BINDING SITE2, designated SEQ ID:15089 and SEQ ID:9619 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58188] Another function of GAM7957 is therefore inhibition of Ribophorin i (RPN1, Accession NP_002941.1), a gene which is a subunit of oligosaccharyltransferase that binds ribosomes. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical

conditions associated with RPN1.

[58189] The function of RPN1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM221.1. Ribosomal protein s6 kinase, 52kda, polypeptide 1 (RPS6KC1, Accession NP_036556.2) is another GAM7957 target gene, herein designated TARGET GENE. RPS6KC1 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by RPS6KC1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RPS6KC1 BINDING SITE, designated SEQ ID:2652, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58190] Another function of GAM7957 is therefore inhibition of Ribosomal protein s6 kinase, 52kda, polypeptide 1 (RPS6KC1, Accession NP_036556.2). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RPS6KC1.

[58191] RRP4 (Accession NP_055100.2) is another GAM7957 tar-

get gene, herein designated TARGET GENE. RRP4 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RRP4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RRP4 BINDING SITE, designated SEQ ID:9420, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58192] Another function of GAM7957 is therefore inhibition of RRP4 (Accession NP_055100.2). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RRP4.

[58193] SBP1 (Accession NP_835222.1) is another GAM7957 target gene, herein designated TARGET GENE. SBP1 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by SBP1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SBP1 BINDING SITE, designated SEQ ID:15055, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58194] Another function of GAM7957 is therefore inhibition of SBP1 (Accession NP_835222.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SBP1.

[58195] SC65 (Accession NP_006446.1) is another GAM7957 target gene, herein designated TARGET GENE. SC65 BINDING SITE1 and SC65 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by SC65, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SC65 BINDING SITE1 and SC65 BINDING SITE2, designated SEQ ID:10571 and SEQ ID:15304 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58196] Another function of GAM7957 is therefore inhibition of SC65 (Accession NP_006446.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SC65.

[58197] Scan domain containing 2 (SCAND2, Accession NP_378666.1) is another GAM7957 target gene, herein designated TARGET GENE. SCAND2 BINDING SITE is a target binding site found in the 3' untranslated region of

multiple transcripts of mRNA encoded by SCAND2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SCAND2 BINDING SITE, designated SEQ ID:12555, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58198] Another function of GAM7957 is therefore inhibition of Scan domain containing 2 (SCAND2, Accession NP_378666.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SCAND2.

[58199] Src family associated phosphoprotein 2 (SCAP2, Accession NP_003921.2) is another GAM7957 target gene, herein designated TARGET GENE. SCAP2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SCAP2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SCAP2 BINDING SITE, designated SEQ ID:16383, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58200] Another function of GAM7957 is therefore inhibition of Src family associated phosphoprotein 2 (SCAP2, Accession NP_003921.2), a gene which interacts with Src family protein tyrosine kinases and SLAP/FYB (SLA). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SCAP2.

[58201] The function of SCAP2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM257.1.SCIN (Accession NP_149119.1) is another GAM7957 target gene, herein designated TARGET GENE. SCIN BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SCIN, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SCIN BINDING SITE, designated SEQ ID:17536, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58202] Another function of GAM7957 is therefore inhibition of SCIN (Accession NP_149119.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of

diseases and clinical conditions associated with SCIN.

[58203] Sodium channel, voltage-gated, type xi, alpha polypeptide (SCN11A, Accession NP_054858.1) is another GAM7957 target gene, herein designated TARGET GENE. SCN11A BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SCN11A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SCN11A BINDING SITE, designated SEQ ID:15992, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58204] Another function of GAM7957 is therefore inhibition of Sodium channel, voltage-gated, type xi, alpha polypeptide (SCN11A, Accession NP_054858.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SCN11A.

[58205] Sodium channel, voltage-gated, type ii, beta polypeptide (SCN2B, Accession NP_004579.1) is another GAM7957 target gene, herein designated TARGET GENE. SCN2B BINDING SITE1 and SCN2B BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded

by SCN2B, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SCN2B BINDING SITE1 and SCN2B BINDING SITE2, designated SEQ ID:3358 and SEQ ID:1782 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58206] Another function of GAM7957 is therefore inhibition of Sodium channel, voltage-gated, type ii, beta polypeptide (SCN2B, Accession NP_004579.1), a gene which modulates channel properties. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SCN2B.

[58207] The function of SCN2B and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1.SCR59 (Accession NP_075559.1) is another GAM7957 target gene, herein designated TARGET GENE. SCR59 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SCR59, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 il-

illustrates the complementarity of the nucleotide sequences of SCR59 BINDING SITE, designated SEQ ID:3264, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58208] Another function of GAM7957 is therefore inhibition of SCR59 (Accession NP_075559.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SCR59.

[58209] Sec24 related gene family, member c (*s. cerevisiae*) (SEC24C, Accession NP_004913.1) is another GAM7957 target gene, herein designated TARGET GENE. SEC24C BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SEC24C, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SEC24C BINDING SITE, designated SEQ ID:7132, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58210] Another function of GAM7957 is therefore inhibition of Sec24 related gene family, member c (*s. cerevisiae*) (SEC24C, Accession NP_004913.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment

of diseases and clinical conditions associated with SEC24C.

[58211] SEC61A1 (Accession NP_037468.1) is another GAM7957 target gene, herein designated TARGET GENE. SEC61A1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SEC61A1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SEC61A1 BINDING SITE, designated SEQ ID:7817, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58212] Another function of GAM7957 is therefore inhibition of SEC61A1 (Accession NP_037468.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SEC61A1.

[58213] Sema domain, immunoglobulin domain (ig), short basic domain, secreted, (semaphorin) 3e (SEMA3E, Accession NP_036563.1) is another GAM7957 target gene, herein designated TARGET GENE. SEMA3E BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SEMA3E, corresponding to a target

binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SEMA3E BINDING SITE, designated SEQ ID:8019, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58214] Another function of GAM7957 is therefore inhibition of Sema domain, immunoglobulin domain (ig), short basic domain, secreted, (semaphorin) 3e (SEMA3E, Accession NP_036563.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SEMA3E.

[58215] Sema domain, seven thrombospondin repeats (type 1 and type 1-like), transmembrane domain (tm) and short cytoplasmic domain, (semaphorin) 5a (SEMA5A, Accession NP_003957.1) is another GAM7957 target gene, herein designated TARGET GENE. SEMA5A BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SEMA5A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SEMA5A BINDING SITE, designated SEQ ID:5826, to the nucleotide se-

quence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58216] Another function of GAM7957 is therefore inhibition of Sema domain, seven thrombospondin repeats (type 1 and type 1-like), transmembrane domain (tm) and short cytoplasmic domain, (semaphorin) 5a (SEMA5A, Accession NP_003957.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SEMA5A.

[58217] Septin 1 (SEPT1, Accession NP_443070.1) is another GAM7957 target gene, herein designated TARGET GENE. SEPT1 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by SEPT1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SEPT1 BINDING SITE, designated SEQ ID:19489, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58218] Another function of GAM7957 is therefore inhibition of Septin 1 (SEPT1, Accession NP_443070.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated

with SEPT1.

[58219] Serum/glucocorticoid regulated kinase-like (SGKL, Accession NP_733827.2) is another GAM7957 target gene, herein designated TARGET GENE. SGKL BINDING SITE1 and SGKL BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by SGKL, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SGKL BINDING SITE1 and SGKL BINDING SITE2, designated SEQ ID:15249 and SEQ ID:9421 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58220] Another function of GAM7957 is therefore inhibition of Serum/glucocorticoid regulated kinase-like (SGKL, Accession NP_733827.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SGKL.

[58221] Serum/glucocorticoid regulated kinase-like (SGKL, Accession NP_733827.2) is another GAM7957 target gene, herein designated TARGET GENE. SGKL BINDING SITE1 and SGKL BINDING SITE2 are target binding sites found in un-

translated regions of multiple transcripts of mRNA encoded by SGK1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SGK1 BINDING SITE1 and SGK1 BINDING SITE2, designated SEQ ID:9421 and SEQ ID:15249 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58222] Another function of GAM7957 is therefore inhibition of Serum/glucocorticoid regulated kinase-like (SGKL, Accession NP_733827.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SGK1.

[58223] SH3YL1 (Accession NP_056492.1) is another GAM7957 target gene, herein designated TARGET GENE. SH3YL1 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by SH3YL1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SH3YL1 BINDING SITE, designated SEQ ID:1043, to the nucleotide sequence of GAM7957 RNA, herein designated

GAM RNA, also designated SEQ ID:297.

[58224] Another function of GAM7957 is therefore inhibition of SH3YL1 (Accession NP_056492.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SH3YL1.

[58225] SHCBP1 (Accession NP_079021.2) is another GAM7957 target gene, herein designated TARGET GENE. SHCBP1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SHCBP1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SHCBP1 BINDING SITE, designated SEQ ID:4225, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58226] Another function of GAM7957 is therefore inhibition of SHCBP1 (Accession NP_079021.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SHCBP1.

[58227] Split hand/foot malformation (ectrodactyly) type 3 (SHFM3, Accession NP_071322.1) is another GAM7957 target gene, herein designated TARGET GENE. SHFM3 BINDING SITE is a target binding site found in the 5' un-

translated region of mRNA encoded by SHFM3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SHFM3 BINDING SITE, designated SEQ ID:15889, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58228] Another function of GAM7957 is therefore inhibition of Split hand/foot malformation (ectrodactyly) type 3 (SHFM3, Accession NP_071322.1), a gene which probably binds to some phosphorylated proteins and promotes their degradation. and therefore may be associated with Split- hand/split- foot malformation. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Split- hand/split- foot malformation, and of other diseases and clinical conditions associated with SHFM3.

[58229] The function of SHFM3 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM47.1.Soc-2 suppressor of clear homolog (c. elegans) (SHOC2, Accession NP_031399.1) is another GAM7957 target gene, herein designated TARGET GENE. SHOC2 BINDING SITE is a target binding site found in the

3' untranslated region of mRNA encoded by SHOC2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SHOC2 BINDING SITE, designated SEQ ID:10301, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58230] Another function of GAM7957 is therefore inhibition of Soc-2 suppressor of clear homolog (c. elegans) (SHOC2, Accession NP_031399.1), a gene which may be a regulator of the let-60 ras pathway. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SHOC2.

[58231] The function of SHOC2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM657.1.Sialyltransferase 8a (alpha-n-acetylneuraminate: alpha-2,8-sialyltransferase, gd3 synthase) (SIAT8A, Accession NP_003025.1) is another GAM7957 target gene, herein designated TARGET GENE. SIAT8A BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by SIAT8A, corresponding to a target binding site such as

BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SIAT8A BINDING SITE, designated SEQ ID:4881, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58232] Another function of GAM7957 is therefore inhibition of Sialyltransferase 8a (alpha-n-acetylneuraminase: alpha-2,8-sialyltransferase, gd3 synthase) (SIAT8A, Accession NP_003025.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SIAT8A.

[58233] Sialic acid binding ig-like lectin 11 (SIGLEC11, Accession NP_443116.1) is another GAM7957 target gene, herein designated TARGET GENE. SIGLEC11 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SIGLEC11, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SIGLEC11 BINDING SITE, designated SEQ ID:9765, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58234] Another function of GAM7957 is therefore inhibition of Sialic acid binding ig-like lectin 11 (SIGLEC11, Accession NP_443116.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SIGLEC11.

[58235] Single-minded homolog 2 (drosophila) (SIM2, Accession NP_033664.1) is another GAM7957 target gene, herein designated TARGET GENE. SIM2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by SIM2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SIM2 BINDING SITE, designated SEQ ID:15218, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58236] Another function of GAM7957 is therefore inhibition of Single-minded homolog 2 (drosophila) (SIM2, Accession NP_033664.1), a gene which may be a master gene of cns development. and therefore may be associated with Dysmorphic features, abnormalities of brain development, down syndrome. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Dysmorphic

features, abnormalities of brain development, down syndrome., and of other diseases and clinical conditions associated with SIM2.

[58237] The function of SIM2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM347.1.Solute carrier family 14 (urea transporter), member 1 (kidd blood group) (SLC14A1, Accession NP_056949.1) is another GAM7957 target gene, herein designated TARGET GENE. SLC14A1 BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by SLC14A1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC14A1 BINDING SITE, designated SEQ ID:4653, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58238] Another function of GAM7957 is therefore inhibition of Solute carrier family 14 (urea transporter), member 1 (kidd blood group) (SLC14A1, Accession NP_056949.1), a gene which is a urea transporters in spermatogenesis. and therefore may be associated with Urine concentration de-

fect. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Urine concentration defect, and of other diseases and clinical conditions associated with SLC14A1.

[58239] The function of SLC14A1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM94.1.Solute carrier family 14 (urea transporter), member 2 (SLC14A2, Accession NP_009094.2) is another GAM7957 target gene, herein designated TARGET GENE. SLC14A2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SLC14A2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC14A2 BINDING SITE, designated SEQ ID:9991, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58240] Another function of GAM7957 is therefore inhibition of Solute carrier family 14 (urea transporter), member 2 (SLC14A2, Accession NP_009094.2), a gene which is a renal urea transporter 2. and therefore may be associated with Orthostatic hypotension. Accordingly, utilities of

GAM7957 include diagnosis, prevention and treatment of Orthostatic hypotension, and of other diseases and clinical conditions associated with SLC14A2.

[58241] The function of SLC14A2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM97.1.Solute carrier family 16 (monocarboxylic acid transporters), member 2 (putative transporter) (SLC16A2, Accession NP_006508.1) is another GAM7957 target gene, herein designated TARGET GENE. SLC16A2 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by SLC16A2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC16A2 BINDING SITE, designated SEQ ID:8449, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58242] Another function of GAM7957 is therefore inhibition of Solute carrier family 16 (monocarboxylic acid transporters), member 2 (putative transporter) (SLC16A2, Accession NP_006508.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases

and clinical conditions associated with SLC16A2.

[58243] Solute carrier family 17 (anion/sugar transporter), member 5 (SLC17A5, Accession NP_036566.1) is another GAM7957 target gene, herein designated TARGET GENE. SLC17A5 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SLC17A5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC17A5 BINDING SITE, designated SEQ ID:7865, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58244] Another function of GAM7957 is therefore inhibition of Solute carrier family 17 (anion/sugar transporter), member 5 (SLC17A5, Accession NP_036566.1), a gene which is a member of a family of anion/cation symporters and therefore may be associated with Salla disease ; infantile sialic acid storage disorder. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Salla disease ; infantile sialic acid storage disorder, and of other diseases and clinical conditions associated with SLC17A5.

[58245] The function of SLC17A5 and its association with various

diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM347.2.Solute carrier family 21 (organic anion transporter), member 9 (SLC21A9, Accession NP_009187.1) is another GAM7957 target gene, herein designated TARGET GENE. SLC21A9 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SLC21A9, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC21A9 BINDING SITE, designated SEQ ID:19542, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58246] Another function of GAM7957 is therefore inhibition of Solute carrier family 21 (organic anion transporter), member 9 (SLC21A9, Accession NP_009187.1), a gene which is Moderately similar to SLC21A2 prostaglandin transporter. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SLC21A9.

[58247] The function of SLC21A9 and its association with various diseases and clinical conditions, has been established by

previous studies, as described hereinabove with reference to GAM71.1.Solute carrier family 22 (organic cation transporter), member 2 (SLC22A2, Accession NP_694861.1) is another GAM7957 target gene, herein designated TARGET GENE. SLC22A2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by SLC22A2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC22A2 BINDING SITE, designated SEQ ID:2052, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58248] Another function of GAM7957 is therefore inhibition of Solute carrier family 22 (organic cation transporter), member 2 (SLC22A2, Accession NP_694861.1), a gene which is an organic cation transporter that may mediate first step in cation resorption. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SLC22A2.

[58249] The function of SLC22A2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM247.2.SLC23A3 (Accession NP_653313.1) is another GAM7957 target gene, herein designated TARGET GENE. SLC23A3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SLC23A3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC23A3 BINDING SITE, designated SEQ ID:7727, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58250] Another function of GAM7957 is therefore inhibition of SLC23A3 (Accession NP_653313.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SLC23A3.

[58251] Solute carrier family 25 (mitochondrial carrier; ornithine transporter) member 15 (SLC25A15, Accession NP_055067.1) is another GAM7957 target gene, herein designated TARGET GENE. SLC25A15 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SLC25A15, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or

BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC25A15 BINDING SITE, designated SEQ ID:12480, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58252] Another function of GAM7957 is therefore inhibition of Solute carrier family 25 (mitochondrial carrier; ornithine transporter) member 15 (SLC25A15, Accession NP_055067.1), a gene which participates the ornithine transport across inner mitochondrial membrane, from the cytoplasm to the matrix and therefore is associated with Hyperornithinemia– hyperammonemia– homocitrullinuria syndrome (hhh syndrome). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Hyperornithinemia– hyperammonemia– homocitrullinuria syndrome (hhh syndrome), and of other diseases and clinical conditions associated with SLC25A15.

[58253] The function of SLC25A15 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM99.1. Solute carrier family 26, member 4 (SLC26A4, Accession NP_000432.1) is another GAM7957 target gene, herein designated TARGET GENE. SLC26A4 BINDING SITE

is a target binding site found in the 3' untranslated region of mRNA encoded by SLC26A4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC26A4 BINDING SITE, designated SEQ ID:15343, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58254] Another function of GAM7957 is therefore inhibition of Solute carrier family 26, member 4 (SLC26A4, Accession NP_000432.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SLC26A4.

[58255] Solute carrier family 28 (sodium-coupled nucleoside transporter), member 2 (SLC28A2, Accession NP_004203.1) is another GAM7957 target gene, herein designated TARGET GENE. SLC28A2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SLC28A2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC28A2 BINDING SITE, designated SEQ ID:16463, to the nucleotide se-

quence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58256] Another function of GAM7957 is therefore inhibition of Solute carrier family 28 (sodium-coupled nucleoside transporter), member 2 (SLC28A2, Accession NP_004203.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SLC28A2.

[58257] Solute carrier family 2 (facilitated glucose transporter), member 3 (SLC2A3, Accession NP_008862.1) is another GAM7957 target gene, herein designated TARGET GENE. SLC2A3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SLC2A3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC2A3 BINDING SITE, designated SEQ ID:15860, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58258] Another function of GAM7957 is therefore inhibition of Solute carrier family 2 (facilitated glucose transporter), member 3 (SLC2A3, Accession NP_008862.1), a gene which probably is a neuronal glucose transporter. Accord-

ingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SLC2A3.

[58259] The function of SLC2A3 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM207.2.Solute carrier family 31 (copper transporters), member 1 (SLC31A1, Accession NP_001850.1) is another GAM7957 target gene, herein designated TARGET GENE. SLC31A1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SLC31A1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC31A1 BINDING SITE, designated SEQ ID:18685, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58260] Another function of GAM7957 is therefore inhibition of Solute carrier family 31 (copper transporters), member 1 (SLC31A1, Accession NP_001850.1), a gene which is involved in high-affinity copper uptake. Accordingly, utilities of GAM7957 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with SLC31A1.

[58261] The function of SLC31A1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM257.1.SLC35E1 (Accession NP_079157.2) is another GAM7957 target gene, herein designated TARGET GENE. SLC35E1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SLC35E1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC35E1 BINDING SITE, designated SEQ ID:6652, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58262] Another function of GAM7957 is therefore inhibition of SLC35E1 (Accession NP_079157.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SLC35E1.

[58263] SLC35E2 (Accession XP_049733.6) is another GAM7957 target gene, herein designated TARGET GENE. SLC35E2

BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SLC35E2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC35E2 BINDING SITE, designated SEQ ID:6363, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58264] Another function of GAM7957 is therefore inhibition of SLC35E2 (Accession XP_049733.6) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SLC35E2.

[58265] SLC35E3 (Accession NP_061126.1) is another GAM7957 target gene, herein designated TARGET GENE. SLC35E3 BINDING SITE1 and SLC35E3 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by SLC35E3, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC35E3 BINDING SITE1 and SLC35E3 BINDING SITE2, designated SEQ ID:4801 and SEQ ID:16325 respectively, to the nucleotide sequence of

GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58266] Another function of GAM7957 is therefore inhibition of SLC35E3 (Accession NP_061126.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SLC35E3.

[58267] Solute carrier family 6 (neurotransmitter transporter, taurine), member 6 (SLC6A6, Accession NP_003034.1) is another GAM7957 target gene, herein designated TARGET GENE. SLC6A6 BINDING SITE1 and SLC6A6 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by SLC6A6, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC6A6 BINDING SITE1 and SLC6A6 BINDING SITE2, designated SEQ ID:10881 and SEQ ID:11013 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58268] Another function of GAM7957 is therefore inhibition of Solute carrier family 6 (neurotransmitter transporter, taurine), member 6 (SLC6A6, Accession NP_003034.1), a

gene which transports taurine and other beta- amino acids like beta- alanine. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SLC6A6.

[58269] The function of SLC6A6 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM374.2.Solute carrier family 7, (cationic amino acid transporter, γ^+ system) member 11 (SLC7A11, Accession NP_055146.1) is another GAM7957 target gene, herein designated TARGET GENE. SLC7A11 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SLC7A11, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC7A11 BINDING SITE, designated SEQ ID:19054, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58270] Another function of GAM7957 is therefore inhibition of Solute carrier family 7, (cationic amino acid transporter, γ^+ system) member 11 (SLC7A11, Accession NP_055146.1) . Accordingly, utilities of GAM7957 include

diagnosis, prevention and treatment of diseases and clinical conditions associated with SLC7A11.

[58271] SMA3 (Accession NP_006771.1) is another GAM7957 target gene, herein designated TARGET GENE. SMA3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SMA3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SMA3 BINDING SITE, designated SEQ ID:18653, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58272] Another function of GAM7957 is therefore inhibition of SMA3 (Accession NP_006771.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SMA3.

[58273] SMAP-5 (Accession NP_110426.3) is another GAM7957 target gene, herein designated TARGET GENE. SMAP-5 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SMAP-5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

SMAP-5 BINDING SITE, designated SEQ ID:10571, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58274] Another function of GAM7957 is therefore inhibition of SMAP-5 (Accession NP_110426.3) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SMAP-5.

[58275] Smc1 structural maintenance of chromosomes 1-like 1 (yeast) (SMC1L1, Accession NP_006297.2) is another GAM7957 target gene, herein designated TARGET GENE. SMC1L1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SMC1L1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SMC1L1 BINDING SITE, designated SEQ ID:938, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58276] Another function of GAM7957 is therefore inhibition of Smc1 structural maintenance of chromosomes 1-like 1 (yeast) (SMC1L1, Accession NP_006297.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and

treatment of diseases and clinical conditions associated with SMC1L1.

[58277] SMG1 (Accession NP_054725.1) is another GAM7957 target gene, herein designated TARGET GENE. SMG1 BINDING SITE1 and SMG1 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by SMG1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SMG1 BINDING SITE1 and SMG1 BINDING SITE2, designated SEQ ID:10571 and SEQ ID:13155 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58278] Another function of GAM7957 is therefore inhibition of SMG1 (Accession NP_054725.1), a gene which acts as the target for the cell- cycle arrest and immunosuppressive effects. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SMG1.

[58279] The function of SMG1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM207.2.SMG1 (Accession NP_054725.1) is another GAM7957 target gene, herein designated TARGET GENE. SMG1 BINDING SITE1 and SMG1 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by SMG1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SMG1 BINDING SITE1 and SMG1 BINDING SITE2, designated SEQ ID:13155 and SEQ ID:10571 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58280] Another function of GAM7957 is therefore inhibition of SMG1 (Accession NP_054725.1), a gene which acts as the target for the cell- cycle arrest and immunosuppressive effects. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SMG1.

[58281] The function of SMG1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM207.2.Small nuclear rna activating complex, polypeptide 2, 45kda (SNAPC2, Accession NP_003074.1)

is another GAM7957 target gene, herein designated TARGET GENE. SNAPC2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SNAPC2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SNAPC2 BINDING SITE, designated SEQ ID:5533, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58282] Another function of GAM7957 is therefore inhibition of Small nuclear rna activating complex, polypeptide 2, 45kda (SNAPC2, Accession NP_003074.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SNAPC2.

[58283] SNX22 (Accession NP_079074.1) is another GAM7957 target gene, herein designated TARGET GENE. SNX22 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SNX22, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SNX22

BINDING SITE, designated SEQ ID:876, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58284] Another function of GAM7957 is therefore inhibition of SNX22 (Accession NP_079074.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SNX22.

[58285] Sry (sex determining region y)-box 7 (SOX7, Accession NP_113627.1) is another GAM7957 target gene, herein designated TARGET GENE. SOX7 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SOX7, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SOX7 BINDING SITE, designated SEQ ID:15980, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58286] Another function of GAM7957 is therefore inhibition of Sry (sex determining region y)-box 7 (SOX7, Accession NP_113627.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SOX7.

[58287] Spastic paraplegia 4 (autosomal dominant; spastin) (SPG4, Accession NP_055761.2) is another GAM7957 target gene, herein designated TARGET GENE. SPG4 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by SPG4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SPG4 BINDING SITE, designated SEQ ID:12724, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58288] Another function of GAM7957 is therefore inhibition of Spastic paraplegia 4 (autosomal dominant; spastin) (SPG4, Accession NP_055761.2), a gene which is probably an ATPase involved in the assembly or function of nuclear protein complexes and therefore may be associated with Spastic paraparesis. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Spastic paraparesis, and of other diseases and clinical conditions associated with SPG4.

[58289] The function of SPG4 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM374.1.Spi-b transcription factor (spi-1/pu.1 related) (SPIB, Accession NP_003112.1) is another GAM7957 target gene, herein designated TARGET GENE. SPIB BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SPIB, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SPIB BINDING SITE, designated SEQ ID:7007, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58290] Another function of GAM7957 is therefore inhibition of Spi-b transcription factor (spi-1/pu.1 related) (SPIB, Accession NP_003112.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SPIB.

[58291] Spir-2 (Accession XP_047462.4) is another GAM7957 target gene, herein designated TARGET GENE. Spir-2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by Spir-2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of Spir-2

BINDING SITE, designated SEQ ID:17700, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58292] Another function of GAM7957 is therefore inhibition of Spir-2 (Accession XP_047462.4) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with Spir-2.

[58293] Serine palmitoyltransferase, long chain base subunit 1 (SPTLC1, Accession NP_847894.1) is another GAM7957 target gene, herein designated TARGET GENE. SPTLC1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by SPTLC1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SPTLC1 BINDING SITE, designated SEQ ID:13585, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58294] Another function of GAM7957 is therefore inhibition of Serine palmitoyltransferase, long chain base subunit 1 (SPTLC1, Accession NP_847894.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment

of diseases and clinical conditions associated with SPTLC1.

[58295] Serine palmitoyltransferase, long chain base subunit 2 (SPTLC2, Accession NP_004854.1) is another GAM7957 target gene, herein designated TARGET GENE. SPTLC2 BINDING SITE1 through SPTLC2 BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by SPTLC2, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SPTLC2 BINDING SITE1 through SPTLC2 BINDING SITE3, designated SEQ ID:6941, SEQ ID:14784 and SEQ ID:15328 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58296] Another function of GAM7957 is therefore inhibition of Serine palmitoyltransferase, long chain base subunit 2 (SPTLC2, Accession NP_004854.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SPTLC2.

[58297] SRGAP1 (Accession XP_051143.3) is another GAM7957 target gene, herein designated TARGET GENE. SRGAP1

BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by SRGAP1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SRGAP1 BINDING SITE, designated SEQ ID:10721, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58298] Another function of GAM7957 is therefore inhibition of SRGAP1 (Accession XP_051143.3) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SRGAP1.

[58299] Synovial sarcoma translocation gene on chromosome 18-like 1 (SS18L1, Accession NP_056373.1) is another GAM7957 target gene, herein designated TARGET GENE. SS18L1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SS18L1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SS18L1 BINDING SITE, designated SEQ ID:7922, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58300] Another function of GAM7957 is therefore inhibition of Synovial sarcoma translocation gene on chromosome 18-like 1 (SS18L1, Accession NP_056373.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SS18L1.

[58301] SSH2 (Accession NP_203747.1) is another GAM7957 target gene, herein designated TARGET GENE. SSH2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by SSH2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SSH2 BINDING SITE, designated SEQ ID:10439, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58302] Another function of GAM7957 is therefore inhibition of SSH2 (Accession NP_203747.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SSH2.

[58303] Signal sequence receptor, gamma (translocon-associated protein gamma) (SSR3, Accession NP_009038.1) is another GAM7957 target gene, herein designated TARGET GENE.

SSR3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SSR3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SSR3 BINDING SITE, designated SEQ ID:12338, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58304] Another function of GAM7957 is therefore inhibition of Signal sequence receptor, gamma (translocon-associated protein gamma) (SSR3, Accession NP_009038.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SSR3.

[58305] Structure specific recognition protein 1 (SSRP1, Accession NP_003137.1) is another GAM7957 target gene, herein designated TARGET GENE. SSRP1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SSRP1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SSRP1 BINDING SITE, designated SEQ ID:11518, to the nucleotide sequence of GAM7957

RNA, herein designated GAM RNA, also designated SEQ ID:297.

- [58306] Another function of GAM7957 is therefore inhibition of Structure specific recognition protein 1 (SSRP1, Accession NP_003137.1), a gene which has specific affinity for DNA modified with cisplatin and has a region of homology to HMG- box DNA binding proteins. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SSRP1.
- [58307] The function of SSRP1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM711.1.Synovial sarcoma, x breakpoint 2 interacting protein (SSX2IP, Accession NP_054740.1) is another GAM7957 target gene, herein designated TARGET GENE. SSX2IP BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by SSX2IP, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SSX2IP BINDING SITE, designated SEQ ID:8979, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58308] Another function of GAM7957 is therefore inhibition of Synovial sarcoma, x breakpoint 2 interacting protein (SSX2IP, Accession NP_054740.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SSX2IP.

[58309] Signal transducer and activator of transcription 3 (acute-phase response factor) (STAT3, Accession NP_003141.2) is another GAM7957 target gene, herein designated TARGET GENE. STAT3 BINDING SITE1 and STAT3 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by STAT3, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of STAT3 BINDING SITE1 and STAT3 BINDING SITE2, designated SEQ ID:5830 and SEQ ID:5830 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58310] Another function of GAM7957 is therefore inhibition of Signal transducer and activator of transcription 3 (acute-phase response factor) (STAT3, Accession NP_003141.2), a gene which carries out a dual function:

signal transduction and activation of transcription. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with STAT3.

[58311] The function of STAT3 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM47.1. Signal transducer and activator of transcription 3 (acute-phase response factor) (STAT3, Accession NP_003141.2) is another GAM7957 target gene, herein designated TARGET GENE. STAT3 BINDING SITE1 and STAT3 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by STAT3, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of STAT3 BINDING SITE1 and STAT3 BINDING SITE2, designated SEQ ID:18951 and SEQ ID:18951 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58312] Another function of GAM7957 is therefore inhibition of Signal transducer and activator of transcription 3

(acute-phase response factor) (STAT3, Accession NP_003141.2), a gene which carries out a dual function: signal transduction and activation of transcription. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with STAT3.

[58313] The function of STAT3 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM47.1. Syntaxin 1a (brain) (STX1A, Accession NP_004594.1) is another GAM7957 target gene, herein designated TARGET GENE. STX1A BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by STX1A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of STX1A BINDING SITE, designated SEQ ID:5464, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58314] Another function of GAM7957 is therefore inhibition of Syntaxin 1a (brain) (STX1A, Accession NP_004594.1), a gene which may play a critical role in neurotransmitter

exocytosis. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with STX1A.

[58315] The function of STX1A and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM158.1. Sudd suppressor of bimD6 homolog (a. nidulans) (SUDD, Accession NP_665913.1) is another GAM7957 target gene, herein designated TARGET GENE. SUDD BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by SUDD, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SUDD BINDING SITE, designated SEQ ID:13065, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58316] Another function of GAM7957 is therefore inhibition of Sudd suppressor of bimD6 homolog (a. nidulans) (SUDD, Accession NP_665913.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SUDD.

[58317] Sudd suppressor of bimd6 homolog (a. nidulans) (SUDD, Accession NP_003822.2) is another GAM7957 target gene, herein designated TARGET GENE. SUDD BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by SUDD, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SUDD BINDING SITE, designated SEQ ID:13065, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58318] Another function of GAM7957 is therefore inhibition of Sudd suppressor of bimd6 homolog (a. nidulans) (SUDD, Accession NP_003822.2). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SUDD.

[58319] Sulfotransferase family, cytosolic, 2a, dehydroepiandrosterone (dhea) -preferring, member 1 (SULT2A1, Accession NP_003158.2) is another GAM7957 target gene, herein designated TARGET GENE. SULT2A1 BINDING SITE1 and SULT2A1 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by SULT2A1, corresponding to target binding sites such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SULT2A1 BINDING SITE1 and SULT2A1 BINDING SITE2, designated SEQ ID:11833 and SEQ ID:16320 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58320] Another function of GAM7957 is therefore inhibition of Sulfotransferase family, cytosolic, 2a, dehydroepiandrosterone (dhea) -preferring, member 1 (SULT2A1, Accession NP_003158.2), a gene which catalyzes the sulfation of steroids and bile acids in the liver and adrenal glands. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SULT2A1.

[58321] The function of SULT2A1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM257.1.SUV39H2 (Accession NP_078946.1) is another GAM7957 target gene, herein designated TARGET GENE. SUV39H2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SUV39H2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SUV39H2 BINDING SITE, designated SEQ ID:2697, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58322] Another function of GAM7957 is therefore inhibition of SUV39H2 (Accession NP_078946.1), a gene which is involved in gene repression and the modification of position-effect-variegation. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SUV39H2.

[58323] The function of SUV39H2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM190.1.SV2A (Accession NP_055664.1) is another GAM7957 target gene, herein designated TARGET GENE. SV2A BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SV2A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SV2A BINDING SITE, designated SEQ ID:15941, to the nucleotide sequence of GAM7957 RNA, herein designated

GAM RNA, also designated SEQ ID:297.

[58324] Another function of GAM7957 is therefore inhibition of SV2A (Accession NP_055664.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SV2A.

[58325] SWAP70 (Accession XP_049197.2) is another GAM7957 target gene, herein designated TARGET GENE. SWAP70 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by SWAP70, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SWAP70 BINDING SITE, designated SEQ ID:18423, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58326] Another function of GAM7957 is therefore inhibition of SWAP70 (Accession XP_049197.2), a gene which is involved not only in nuclear events but also in signaling in B- cell activation. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SWAP70.

[58327] The function of SWAP70 and its association with various

diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM257.1.SWAP70 (Accession NP_055870.1) is another GAM7957 target gene, herein designated TARGET GENE. SWAP70 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by SWAP70, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SWAP70 BINDING SITE, designated SEQ ID:18423, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58328] Another function of GAM7957 is therefore inhibition of SWAP70 (Accession NP_055870.1), a gene which is involved not only in nuclear events but also in signaling in B- cell activation. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SWAP70.

[58329] The function of SWAP70 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM257.1.Reserved (SYAP1, Accession NP_116185.2) is

another GAM7957 target gene, herein designated TARGET GENE. SYAP1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SYAP1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SYAP1 BINDING SITE, designated SEQ ID:4339, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58330] Another function of GAM7957 is therefore inhibition of Reserved (SYAP1, Accession NP_116185.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SYAP1.

[58331] Synaptogyrin 1 (SYNGR1, Accession NP_004702.2) is another GAM7957 target gene, herein designated TARGET GENE. SYNGR1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by SYNGR1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SYNGR1 BINDING SITE, designated SEQ ID:18392, to the nucleotide se-

quence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58332] Another function of GAM7957 is therefore inhibition of Synaptogyrin 1 (SYNGR1, Accession NP_004702.2), a gene which belongs to transmembrane synaptic vesicle protein and may function in membrane recycling. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SYNGR1.

[58333] The function of SYNGR1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM63.1. Synaptotagmin xi (SYT11, Accession NP_689493.2) is another GAM7957 target gene, herein designated TARGET GENE. SYT11 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SYT11, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SYT11 BINDING SITE, designated SEQ ID:18126, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58334] Another function of GAM7957 is therefore inhibition of Synaptotagmin xi (SYT11, Accession NP_689493.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SYT11.

[58335] TA-LRRP (Accession NP_056165.1) is another GAM7957 target gene, herein designated TARGET GENE. TA-LRRP BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TA-LRRP, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TA-LRRP BINDING SITE, designated SEQ ID:4246, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58336] Another function of GAM7957 is therefore inhibition of TA-LRRP (Accession NP_056165.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TA-LRRP.

[58337] Transforming, acidic coiled-coil containing protein 1 (TACC1, Accession NP_006274.1) is another GAM7957 target gene, herein designated TARGET GENE. TACC1

BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TACC1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TACC1 BINDING SITE, designated SEQ ID:14784, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58338] Another function of GAM7957 is therefore inhibition of Transforming, acidic coiled-coil containing protein 1 (TACC1, Accession NP_006274.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TACC1.

[58339] TACTILE (Accession NP_005807.1) is another GAM7957 target gene, herein designated TARGET GENE. TACTILE BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TACTILE, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TACTILE BINDING SITE, designated SEQ ID:19031, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58340] Another function of GAM7957 is therefore inhibition of TACTILE (Accession NP_005807.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TACTILE.

[58341] Transcriptional adaptor 2 (ada2 homolog, yeast)-like (TADA2L, Accession NP_001479.2) is another GAM7957 target gene, herein designated TARGET GENE. TADA2L BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by TADA2L, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TADA2L BINDING SITE, designated SEQ ID:9344, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58342] Another function of GAM7957 is therefore inhibition of Transcriptional adaptor 2 (ada2 homolog, yeast)-like (TADA2L, Accession NP_001479.2), a gene which is one PCAF histone acetylase complex subunit, and a probable transcriptional adaptor protein. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of

diseases and clinical conditions associated with TADA2L.

[58343] The function of TADA2L and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM347.1.TADA3L (Accession NP_597814.1) is another GAM7957 target gene, herein designated TARGET GENE. TADA3L BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by TADA3L, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TADA3L BINDING SITE, designated SEQ ID:9420, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58344] Another function of GAM7957 is therefore inhibition of TADA3L (Accession NP_597814.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TADA3L.

[58345] Taf1-like rna polymerase ii, tata box binding protein (tbp)-associated factor, 210kda (TAF1L, Accession NP_722516.1) is another GAM7957 target gene, herein

designated TARGET GENE. TAF1L BINDING SITE1 and TAF1L BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by TAF1L, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TAF1L BINDING SITE1 and TAF1L BINDING SITE2, designated SEQ ID:4247 and SEQ ID:585 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58346] Another function of GAM7957 is therefore inhibition of Taf1-like rna polymerase ii, tata box binding protein (tbp)-associated factor, 210kda (TAF1L, Accession NP_722516.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TAF1L.

[58347] TARSH (Accession NP_079077.1) is another GAM7957 target gene, herein designated TARGET GENE. TARSH BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by TARSH, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of TARSH BINDING SITE, designated SEQ ID:9763, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58348] Another function of GAM7957 is therefore inhibition of TARSH (Accession NP_079077.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TARSH.

[58349] TBRG1 (Accession NP_116200.1) is another GAM7957 target gene, herein designated TARGET GENE. TBRG1 BINDING SITE1 and TBRG1 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by TBRG1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TBRG1 BINDING SITE1 and TBRG1 BINDING SITE2, designated SEQ ID:10438 and SEQ ID:19130 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58350] Another function of GAM7957 is therefore inhibition of TBRG1 (Accession NP_116200.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of

diseases and clinical conditions associated with TBGR1.

[58351] T-box 1 (TBX1, Accession NP_005983.1) is another GAM7957 target gene, herein designated TARGET GENE. TBX1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by TBX1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TBX1 BINDING SITE, designated SEQ ID:9841, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58352] Another function of GAM7957 is therefore inhibition of T-box 1 (TBX1, Accession NP_005983.1), a gene which may act as a transcription factor and contains a T-box DNA binding domain. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TBX1.

[58353] The function of TBX1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM139.1. T-box 19 (TBX19, Accession NP_005140.1) is another GAM7957 target gene, herein designated TAR-

GET GENE. TBX19 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TBX19, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TBX19 BINDING SITE, designated SEQ ID:7816, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58354] Another function of GAM7957 is therefore inhibition of T-box 19 (TBX19, Accession NP_005140.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TBX19.

[58355] T-box 6 (TBX6, Accession NP_542936.1) is another GAM7957 target gene, herein designated TARGET GENE. TBX6 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by TBX6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TBX6 BINDING SITE, designated SEQ ID:19047, to the nucleotide sequence of GAM7957

RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58356] Another function of GAM7957 is therefore inhibition of T-box 6 (TBX6, Accession NP_542936.1), a gene which is a probable transcriptional regulator involved in developmental processes. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TBX6.

[58357] The function of TBX6 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM59.1. Transcription factor 4 (TCF4, Accession NP_003190.1) is another GAM7957 target gene, herein designated TARGET GENE. TCF4 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by TCF4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TCF4 BINDING SITE, designated SEQ ID:839, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58358] Another function of GAM7957 is therefore inhibition of Transcription factor 4 (TCF4, Accession NP_003190.1), a

gene which is a transcriptional activator; interacts with ITF1 (TCF3); and contains basic helix– loop– helix domain. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TCF4.

[58359] The function of TCF4 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM180.1. Transcription factor 7 (t-cell specific, hmg-box) (TCF7, Accession NP_003193.1) is another GAM7957 target gene, herein designated TARGET GENE. TCF7 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TCF7, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TCF7 BINDING SITE, designated SEQ ID:2362, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58360] Another function of GAM7957 is therefore inhibition of Transcription factor 7 (t-cell specific, hmg-box) (TCF7, Accession NP_003193.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of

diseases and clinical conditions associated with TCF7.

[58361] T-cell leukemia translocation altered gene (TCTA, Accession NP_071503.1) is another GAM7957 target gene, herein designated TARGET GENE. TCTA BINDING SITE1 and TCTA BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by TCTA, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TCTA BINDING SITE1 and TCTA BINDING SITE2, designated SEQ ID:20025 and SEQ ID:17399 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58362] Another function of GAM7957 is therefore inhibition of T-cell leukemia translocation altered gene (TCTA, Accession NP_071503.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TCTA.

[58363] TDE1L (Accession NP_065806.1) is another GAM7957 target gene, herein designated TARGET GENE. TDE1L BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TDE1L, corresponding to a target binding site such as BINDING SITE I, BINDING

SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TDE1L BINDING SITE, designated SEQ ID:2974, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58364] Another function of GAM7957 is therefore inhibition of TDE1L (Accession NP_065806.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TDE1L.

[58365] TEM6 (Accession NP_073585.6) is another GAM7957 target gene, herein designated TARGET GENE. TEM6 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TEM6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TEM6 BINDING SITE, designated SEQ ID:19194, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58366] Another function of GAM7957 is therefore inhibition of TEM6 (Accession NP_073585.6), a gene which displays elevated expression during tumor angiogenesis. Accordingly, utilities of GAM7957 include diagnosis, prevention

and treatment of diseases and clinical conditions associated with TEM6.

[58367] The function of TEM6 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM401.1. TEM7 (Accession NP_065138.2) is another GAM7957 target gene, herein designated TARGET GENE. TEM7 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TEM7, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TEM7 BINDING SITE, designated SEQ ID:17985, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58368] Another function of GAM7957 is therefore inhibition of TEM7 (Accession NP_065138.2), a gene which involves in angiogenesis and therefore may be associated with Colorectal cancer. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Colorectal cancer, and of other diseases and clinical conditions associated with TEM7.

[58369] The function of TEM7 and its association with various dis-

eases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM63.1.TIP47 (Accession NP_005808.2) is another GAM7957 target gene, herein designated TARGET GENE. TIP47 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TIP47, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TIP47 BINDING SITE, designated SEQ ID:18951, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58370] Another function of GAM7957 is therefore inhibition of TIP47 (Accession NP_005808.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TIP47.

[58371] Triple homeobox 1 (TIX1, Accession NP_055850.1) is another GAM7957 target gene, herein designated TARGET GENE. TIX1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TIX1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide se-

quences of TIX1 BINDING SITE, designated SEQ ID:17424, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58372] Another function of GAM7957 is therefore inhibition of Triple homeobox 1 (TIX1, Accession NP_055850.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TIX1.

[58373] Tight junction protein 1 (zona occludens 1) (TJP1, Accession NP_783297.1) is another GAM7957 target gene, herein designated TARGET GENE. TJP1 BINDING SITE1 and TJP1 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by TJP1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TJP1 BINDING SITE1 and TJP1 BINDING SITE2, designated SEQ ID:7287 and SEQ ID:18566 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58374] Another function of GAM7957 is therefore inhibition of Tight junction protein 1 (zona occludens 1) (TJP1, Accession NP_783297.1), a gene which colocalizes and interacts

with cadherins in cells lacking tight junctions. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TJP1.

[58375] The function of TJP1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM136.1. Tight junction protein 1 (zona occludens 1) (TJP1, Accession NP_003248.2) is another GAM7957 target gene, herein designated TARGET GENE. TJP1 BINDING SITE1 and TJP1 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by TJP1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TJP1 BINDING SITE1 and TJP1 BINDING SITE2, designated SEQ ID:18566 and SEQ ID:7287 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58376] Another function of GAM7957 is therefore inhibition of Tight junction protein 1 (zona occludens 1) (TJP1, Accession NP_003248.2), a gene which colocalizes and interacts

with cadherins in cells lacking tight junctions. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TJP1.

[58377] The function of TJP1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM136.1. Transmembrane protein 1 (TMEM1, Accession NP_003265.2) is another GAM7957 target gene, herein designated TARGET GENE. TMEM1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TMEM1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TMEM1 BINDING SITE, designated SEQ ID:19683, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58378] Another function of GAM7957 is therefore inhibition of Transmembrane protein 1 (TMEM1, Accession NP_003265.2). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TMEM1.

[58379] Transmembrane protein 4 (TMEM4, Accession NP_055070.1) is another GAM7957 target gene, herein designated TARGET GENE. TMEM4 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by TMEM4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TMEM4 BINDING SITE, designated SEQ ID:12891, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58380] Another function of GAM7957 is therefore inhibition of Transmembrane protein 4 (TMEM4, Accession NP_055070.1), a gene which is a putative type II membrane protein. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TMEM4.

[58381] The function of TMEM4 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM401.1. TMG4 (Accession NP_076986.1) is another GAM7957 target gene, herein designated TARGET GENE. TMG4 BINDING SITE is a target binding site found in the

3' untranslated region of mRNA encoded by TMG4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TMG4 BINDING SITE, designated SEQ ID:3326, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58382] Another function of GAM7957 is therefore inhibition of TMG4 (Accession NP_076986.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TMG4.

[58383] Tumor necrosis factor receptor superfamily, member 1b (TNFRSF1B, Accession NP_001057.1) is another GAM7957 target gene, herein designated TARGET GENE. TNFRSF1B BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TNFRSF1B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TNFRSF1B BINDING SITE, designated SEQ ID:13649, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58384] Another function of GAM7957 is therefore inhibition of

Tumor necrosis factor receptor superfamily, member 1b (TNFRSF1B, Accession NP_001057.1), a gene which mediates proinflammatory cellular responses. and therefore may be associated with Familial combined hyperlipidemia. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Familial combined hyperlipidemia., and of other diseases and clinical conditions associated with TNFRSF1B.

[58385] The function of TNFRSF1B and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM72.1. Tumor necrosis factor (ligand) superfamily, member 10 (TNFSF10, Accession NP_003801.1) is another GAM7957 target gene, herein designated TARGET GENE. TNFSF10 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TNFSF10, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TNFSF10 BINDING SITE, designated SEQ ID:6521, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58386] Another function of GAM7957 is therefore inhibition of

Tumor necrosis factor (ligand) superfamily, member 10 (TNFSF10, Accession NP_003801.1), a gene which mediates cell death. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TNFSF10.

[58387] The function of TNFSF10 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM72.1. Tumor necrosis factor (ligand) superfamily, member 14 (TNFSF14, Accession NP_003798.2) is another GAM7957 target gene, herein designated TARGET GENE. TNFSF14 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by TNFSF14, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TNFSF14 BINDING SITE, designated SEQ ID:722, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58388] Another function of GAM7957 is therefore inhibition of Tumor necrosis factor (ligand) superfamily, member 14 (TNFSF14, Accession NP_003798.2), a gene which acts as

a receptor for herpes simplex virus. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TNFSF14.

[58389] The function of TNFSF14 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM236.1. Tumor necrosis factor (ligand) superfamily, member 14 (TNFSF14, Accession NP_742011.1) is another GAM7957 target gene, herein designated TARGET GENE. TNFSF14 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by TNFSF14, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TNFSF14 BINDING SITE, designated SEQ ID:722, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58390] Another function of GAM7957 is therefore inhibition of Tumor necrosis factor (ligand) superfamily, member 14 (TNFSF14, Accession NP_742011.1), a gene which acts as a receptor for herpes simplex virus. Accordingly, utilities

of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TNFSF14.

[58391] The function of TNFSF14 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM236.1. Tumor necrosis factor (ligand) superfamily, member 15 (TNFSF15, Accession NP_005109.2) is another GAM7957 target gene, herein designated TARGET GENE. TNFSF15 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TNFSF15, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TNFSF15 BINDING SITE, designated SEQ ID:1981, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58392] Another function of GAM7957 is therefore inhibition of Tumor necrosis factor (ligand) superfamily, member 15 (TNFSF15, Accession NP_005109.2), a gene which acts as an autocrine factor to induce apoptosis in endothelial cells. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical condi-

tions associated with TNFSF15.

[58393] The function of TNFSF15 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM100.1.Tnfaip3 interacting protein 3 (TNIP3, Accession NP_079149.2) is another GAM7957 target gene, herein designated TARGET GENE. TNIP3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TNIP3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TNIP3 BINDING SITE, designated SEQ ID:16969, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58394] Another function of GAM7957 is therefore inhibition of Tnfaip3 interacting protein 3 (TNIP3, Accession NP_079149.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TNIP3.

[58395] Trinucleotide repeat containing 5 (TNRC5, Accession NP_006577.1) is another GAM7957 target gene, herein designated TARGET GENE. TNRC5 BINDING SITE is a target

binding site found in the 5` untranslated region of mRNA encoded by TNRC5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TNRC5 BINDING SITE, designated SEQ ID:17344, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58396] Another function of GAM7957 is therefore inhibition of Trinucleotide repeat containing 5 (TNRC5, Accession NP_006577.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TNRC5.

[58397] TP53I5 (Accession XP_290532.2) is another GAM7957 target gene, herein designated TARGET GENE. TP53I5 BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by TP53I5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TP53I5 BINDING SITE, designated SEQ ID:13608, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58398] Another function of GAM7957 is therefore inhibition of TP53I5 (Accession XP_290532.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TP53I5.

[58399] Tropomyosin 4 (TPM4, Accession NP_003281.1) is another GAM7957 target gene, herein designated TARGET GENE. TPM4 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TPM4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TPM4 BINDING SITE, designated SEQ ID:19193, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58400] Another function of GAM7957 is therefore inhibition of Tropomyosin 4 (TPM4, Accession NP_003281.1), a gene which plays a central role, in association with the troponin complex, in the calcium dependent regulation of vertebrate striated muscle contraction. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TPM4.

[58401] The function of TPM4 and its association with various diseases and clinical conditions, has been established by

previous studies, as described hereinabove with reference to GAM72.1.Tnfrsf1a-associated via death domain (TRADD, Accession NP_003780.1) is another GAM7957 target gene, herein designated TARGET GENE. TRADD BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by TRADD, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TRADD BINDING SITE, designated SEQ ID:15543, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58402] Another function of GAM7957 is therefore inhibition of Tnfrsf1a-associated via death domain (TRADD, Accession NP_003780.1), a gene which specifically interacts with the cytoplasmic domain of activated tnfr1. interacts with traf1 and traf2), fadd and rip. acts as an adaptor molecule for tnfr1 mediating its interaction with fadd. overexpression of tradd leads to two major tnfr1-induced responses, apoptosis and activation of nf- κ B. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions as-

sociated with TRADD.

[58403] The function of TRADD and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM40.1. Tnfrsf1a-associated via death domain (TRADD, Accession NP_700474.1) is another GAM7957 target gene, herein designated TARGET GENE. TRADD BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by TRADD, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TRADD BINDING SITE, designated SEQ ID:15543, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58404] Another function of GAM7957 is therefore inhibition of Tnfrsf1a-associated via death domain (TRADD, Accession NP_700474.1), a gene which specifically interacts with the cytoplasmic domain of activated tnfr1. interacts with traf1 (traf1 and traf2), fadd and rip. acts as an adaptor molecule for tnfr1 mediating its interaction with fadd. overexpression of tradd leads to two major tnf- induced

responses, apoptosis and activation of $\text{nf-}\kappa\text{b}$. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TRADD.

[58405] The function of TRADD and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM40.1. TRAM2 (Accession NP_036420.1) is another GAM7957 target gene, herein designated TARGET GENE. TRAM2 BINDING SITE1 and TRAM2 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by TRAM2, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TRAM2 BINDING SITE1 and TRAM2 BINDING SITE2, designated SEQ ID:5830 and SEQ ID:9810 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58406] Another function of GAM7957 is therefore inhibition of TRAM2 (Accession NP_036420.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TRAM2.

[58407] TRB2 (Accession NP_067675.1) is another GAM7957 target gene, herein designated TARGET GENE. TRB2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TRB2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TRB2 BINDING SITE, designated SEQ ID:15438, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58408] Another function of GAM7957 is therefore inhibition of TRB2 (Accession NP_067675.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TRB2.

[58409] TRIAD3 (Accession NP_061884.2) is another GAM7957 target gene, herein designated TARGET GENE. TRIAD3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TRIAD3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TRIAD3 BINDING SITE, designated SEQ ID:17399, to the nucleotide sequence of GAM7957 RNA, herein designated

GAM RNA, also designated SEQ ID:297.

[58410] Another function of GAM7957 is therefore inhibition of TRIAD3 (Accession NP_061884.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TRIAD3.

[58411] Tripartite motif-containing 14 (TRIM14, Accession NP_150089.1) is another GAM7957 target gene, herein designated TARGET GENE. TRIM14 BINDING SITE1 and TRIM14 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by TRIM14, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TRIM14 BINDING SITE1 and TRIM14 BINDING SITE2, designated SEQ ID:17397 and SEQ ID:2835 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58412] Another function of GAM7957 is therefore inhibition of Tripartite motif-containing 14 (TRIM14, Accession NP_150089.1), a gene which is composed of 3 zinc-binding domains and is involved in development and cell growth. Accordingly, utilities of GAM7957 include diagno-

sis, prevention and treatment of diseases and clinical conditions associated with TRIM14.

[58413] The function of TRIM14 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM144.1.Tripartite motif-containing 14 (TRIM14, Accession NP_055603.2) is another GAM7957 target gene, herein designated TARGET GENE. TRIM14 BINDING SITE1 and TRIM14 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by TRIM14, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TRIM14 BINDING SITE1 and TRIM14 BINDING SITE2, designated SEQ ID:2835 and SEQ ID:8138 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58414] Another function of GAM7957 is therefore inhibition of Tripartite motif-containing 14 (TRIM14, Accession NP_055603.2), a gene which is composed of 3 zinc-binding domains and is involved in development and cell growth. Accordingly, utilities of GAM7957 include diagno-

sis, prevention and treatment of diseases and clinical conditions associated with TRIM14.

[58415] The function of TRIM14 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM144.1. Tripartite motif-containing 35 (TRIM35, Accession NP_741983.1) is another GAM7957 target gene, herein designated TARGET GENE. TRIM35 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by TRIM35, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TRIM35 BINDING SITE, designated SEQ ID:16080, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58416] Another function of GAM7957 is therefore inhibition of Tripartite motif-containing 35 (TRIM35, Accession NP_741983.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TRIM35.

[58417] Tripartite motif-containing 35 (TRIM35, Accession NP_055881.1) is another GAM7957 target gene, herein

designated TARGET GENE. TRIM35 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by TRIM35, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TRIM35 BINDING SITE, designated SEQ ID:16080, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58418] Another function of GAM7957 is therefore inhibition of Tripartite motif-containing 35 (TRIM35, Accession NP_055881.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TRIM35.

[58419] TRIM46 (Accession NP_079334.1) is another GAM7957 target gene, herein designated TARGET GENE. TRIM46 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TRIM46, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TRIM46 BINDING SITE, designated SEQ ID:9420, to the nucleotide sequence of GAM7957 RNA, herein designated

GAM RNA, also designated SEQ ID:297.

[58420] Another function of GAM7957 is therefore inhibition of TRIM46 (Accession NP_079334.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TRIM46.

[58421] TRIM56 (Accession XP_168586.1) is another GAM7957 target gene, herein designated TARGET GENE. TRIM56 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by TRIM56, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TRIM56 BINDING SITE, designated SEQ ID:1762, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58422] Another function of GAM7957 is therefore inhibition of TRIM56 (Accession XP_168586.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TRIM56.

[58423] TRIM56 (Accession NP_112223.1) is another GAM7957 target gene, herein designated TARGET GENE. TRIM56 BINDING SITE is a target binding site found in the 3' un-

translated region of multiple transcripts of mRNA encoded by TRIM56, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TRIM56 BINDING SITE, designated SEQ ID:1762, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58424] Another function of GAM7957 is therefore inhibition of TRIM56 (Accession NP_112223.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TRIM56.

[58425] Tripartite motif-containing 8 (TRIM8, Accession NP_112174.1) is another GAM7957 target gene, herein designated TARGET GENE. TRIM8 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TRIM8, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TRIM8 BINDING SITE, designated SEQ ID:6715, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58426] Another function of GAM7957 is therefore inhibition of Tripartite motif-containing 8 (TRIM8, Accession NP_112174.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TRIM8.

[58427] Transient receptor potential cation channel, subfamily m, member 2 (TRPM2, Accession NP_003298.1) is another GAM7957 target gene, herein designated TARGET GENE. TRPM2 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by TRPM2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TRPM2 BINDING SITE, designated SEQ ID:782, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58428] Another function of GAM7957 is therefore inhibition of Transient receptor potential cation channel, subfamily m, member 2 (TRPM2, Accession NP_003298.1), a gene which may be a calcium channel. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TRPM2.

[58429] The function of TRPM2 and its association with various

diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM335.1. Transient receptor potential cation channel, subfamily m, member 3 (TRPM3, Accession NP_079247.2) is another GAM7957 target gene, herein designated TARGET GENE. TRPM3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TRPM3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TRPM3 BINDING SITE, designated SEQ ID:16946, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58430] Another function of GAM7957 is therefore inhibition of Transient receptor potential cation channel, subfamily m, member 3 (TRPM3, Accession NP_079247.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TRPM3.

[58431] Transient receptor potential cation channel, subfamily m, member 4 (TRPM4, Accession NP_060106.2) is another GAM7957 target gene, herein designated TARGET GENE.

TRPM4 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by TRPM4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TRPM4 BINDING SITE, designated SEQ ID:2740, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58432] Another function of GAM7957 is therefore inhibition of Transient receptor potential cation channel, subfamily m, member 4 (TRPM4, Accession NP_060106.2), a gene which contains two transient receptor domains. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TRPM4.

[58433] The function of TRPM4 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM607.2. Transient receptor potential cation channel, subfamily m, member 8 (TRPM8, Accession NP_076985.3) is another GAM7957 target gene, herein designated TARGET GENE. TRPM8 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by

TRPM8, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TRPM8 BINDING SITE, designated SEQ ID:9731, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58434] Another function of GAM7957 is therefore inhibition of Transient receptor potential cation channel, subfamily m, member 8 (TRPM8, Accession NP_076985.3), a gene which is thought to form a receptor- activated calcium permeant cation channel. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TRPM8.

[58435] The function of TRPM8 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM223.2. Transient receptor potential cation channel, subfamily v, member 1 (TRPV1, Accession NP_542437.1) is another GAM7957 target gene, herein designated TARGET GENE. TRPV1 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by TRPV1, corresponding to a target

binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TRPV1 BINDING SITE, designated SEQ ID:14712, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58436] Another function of GAM7957 is therefore inhibition of Transient receptor potential cation channel, subfamily v, member 1 (TRPV1, Accession NP_542437.1), a gene which functions as a receptor for capsaicin. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TRPV1.

[58437] The function of TRPV1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM130.1.TSAP6 (Accession NP_060704.1) is another GAM7957 target gene, herein designated TARGET GENE. TSAP6 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by TSAP6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TSAP6 BINDING SITE, designated SEQ ID:15578, to the

nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58438] Another function of GAM7957 is therefore inhibition of TSAP6 (Accession NP_060704.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TSAP6.

[58439] Translin-associated factor x (TSNAX, Accession NP_005990.1) is another GAM7957 target gene, herein designated TARGET GENE. TSNAX BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TSNAX, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TSNAX BINDING SITE, designated SEQ ID:13066, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58440] Another function of GAM7957 is therefore inhibition of Translin-associated factor x (TSNAX, Accession NP_005990.1), a gene which Interacts with translin (TSN). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TSNAX.

[58441] The function of TSNAX and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM257.1. Transcription termination factor, rna polymerase ii (TTF2, Accession NP_003585.2) is another GAM7957 target gene, herein designated TARGET GENE. TTF2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TTF2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TTF2 BINDING SITE, designated SEQ ID:6501, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58442] Another function of GAM7957 is therefore inhibition of Transcription termination factor, rna polymerase ii (TTF2, Accession NP_003585.2), a gene which is involved either in promoting the migration process or in repressing differentiation of the TFCs until migration has occurred and therefore may be associated with Bamforth-lazarus syndrome. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Bamforth-lazarus syndrome, and of other diseases and clinical conditions asso-

ciated with TTF2.

[58443] The function of TTF2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM270.1.TU12B1-TY (Accession NP_057659.1) is another GAM7957 target gene, herein designated TARGET GENE. TU12B1-TY BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by TU12B1-TY, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TU12B1-TY BINDING SITE, designated SEQ ID:9085, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58444] Another function of GAM7957 is therefore inhibition of TU12B1-TY (Accession NP_057659.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TU12B1-TY.

[58445] U1SNRNPBP (Accession NP_851030.1) is another GAM7957 target gene, herein designated TARGET GENE. U1SNRNPBP BINDING SITE1 and U1SNRNPBP BINDING SITE2

are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by U1SNRNPBP, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of U1SNRNPBP BINDING SITE1 and U1SNRNPBP BINDING SITE2, designated SEQ ID:13066 and SEQ ID:1492 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58446] Another function of GAM7957 is therefore inhibition of U1SNRNPBP (Accession NP_851030.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with U1SNRNPBP.

[58447] U1SNRNPBP (Accession NP_851034.1) is another GAM7957 target gene, herein designated TARGET GENE. U1SNRNPBP BINDING SITE1 and U1SNRNPBP BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by U1SNRNPBP, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide se-

quences of U1SNRNPBP BINDING SITE1 and U1SNRNPBP BINDING SITE2, designated SEQ ID:13066 and SEQ ID:12063 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58448] Another function of GAM7957 is therefore inhibition of U1SNRNPBP (Accession NP_851034.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with U1SNRNPBP.

[58449] UBCE7IP5 (Accession NP_055763.1) is another GAM7957 target gene, herein designated TARGET GENE. UBCE7IP5 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by UBCE7IP5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of UBCE7IP5 BINDING SITE, designated SEQ ID:14779, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58450] Another function of GAM7957 is therefore inhibition of UBCE7IP5 (Accession NP_055763.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment

of diseases and clinical conditions associated with UBCE7IP5.

[58451] Ubiquitin-conjugating enzyme e2b (rad6 homolog) (UBE2B, Accession NP_003328.1) is another GAM7957 target gene, herein designated TARGET GENE. UBE2B BINDING SITE1 and UBE2B BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by UBE2B, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of UBE2B BINDING SITE1 and UBE2B BINDING SITE2, designated SEQ ID:1890 and SEQ ID:12734 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58452] Another function of GAM7957 is therefore inhibition of Ubiquitin-conjugating enzyme e2b (rad6 homolog) (UBE2B, Accession NP_003328.1), a gene which catalyzes the covalent attachment of ubiquitin to other proteins and is required for postreplication repair of uv- damaged dna. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with UBE2B.

[58453] The function of UBE2B and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM72.1. Ubiquitin-conjugating enzyme e2g 2 (ubc7 homolog, yeast) (UBE2G2, Accession NP_003334.2) is another GAM7957 target gene, herein designated TARGET GENE. UBE2G2 BINDING SITE1 and UBE2G2 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by UBE2G2, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of UBE2G2 BINDING SITE1 and UBE2G2 BINDING SITE2, designated SEQ ID:11556 and SEQ ID:8877 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58454] Another function of GAM7957 is therefore inhibition of Ubiquitin-conjugating enzyme e2g 2 (ubc7 homolog, yeast) (UBE2G2, Accession NP_003334.2), a gene which catalyzes the covalent attachment of ubiquitin to other proteins. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with UBE2G2.

[58455] The function of UBE2G2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM72.1.UNC5CL (Accession NP_775832.1) is another GAM7957 target gene, herein designated TARGET GENE. UNC5CL BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by UNC5CL, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of UNC5CL BINDING SITE, designated SEQ ID:8143, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58456] Another function of GAM7957 is therefore inhibition of UNC5CL (Accession NP_775832.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with UNC5CL.

[58457] UNC5H2 (Accession NP_734465.1) is another GAM7957 target gene, herein designated TARGET GENE. UNC5H2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by UNC5H2, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of UNC5H2 BINDING SITE, designated SEQ ID:14996, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58458] Another function of GAM7957 is therefore inhibition of UNC5H2 (Accession NP_734465.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with UNC5H2.

[58459] Uroplakin 1b (UPK1B, Accession NP_008883.1) is another GAM7957 target gene, herein designated TARGET GENE. UPK1B BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by UPK1B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of UPK1B BINDING SITE, designated SEQ ID:19696, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58460] Another function of GAM7957 is therefore inhibition of Uroplakin 1b (UPK1B, Accession NP_008883.1), a gene which strengthens and stabilizes the urothelial apical sur-

face of the asymmetric unit membrane of mammalian bladder epithelium. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with UPK1B.

[58461] The function of UPK1B and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM223.1. Ubiquitin specific protease 14 (trna-guanine transglycosylase) (USP14, Accession NP_005142.1) is another GAM7957 target gene, herein designated TARGET GENE. USP14 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by USP14, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of USP14 BINDING SITE, designated SEQ ID:10433, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58462] Another function of GAM7957 is therefore inhibition of Ubiquitin specific protease 14 (trna-guanine transglycosylase) (USP14, Accession NP_005142.1), a gene which is similar to ubiquitin-specific cysteine (thiol) proteases and tRNA-guanine transglycosylase. Accordingly, utilities of

GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with USP14.

[58463] The function of USP14 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM94.1. Uronyl-2-sulfotransferase (UST, Accession NP_005706.1) is another GAM7957 target gene, herein designated TARGET GENE. UST BINDING SITE1 and UST BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by UST, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of UST BINDING SITE1 and UST BINDING SITE2, designated SEQ ID:19210 and SEQ ID:11817 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58464] Another function of GAM7957 is therefore inhibition of Uronyl-2-sulfotransferase (UST, Accession NP_005706.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with UST.

[58465] Vitamin d (1,25- dihydroxyvitamin d3) receptor (VDR, Ac-

cession NP_000367.1) is another GAM7957 target gene, herein designated TARGET GENE. VDR BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by VDR, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of VDR BINDING SITE, designated SEQ ID:15223, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58466] Another function of GAM7957 is therefore inhibition of Vitamin d (1,25- dihydroxyvitamin d3) receptor (VDR, Accession NP_000367.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with VDR.

[58467] Vascular endothelial growth factor (VEGF, Accession NP_003367.3) is another GAM7957 target gene, herein designated TARGET GENE. VEGF BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by VEGF, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of VEGF BINDING SITE, designated

SEQ ID:13604, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58468] Another function of GAM7957 is therefore inhibition of Vascular endothelial growth factor (VEGF, Accession NP_003367.3), a gene which induces endothelial cell proliferation and vascular permeability and therefore may be associated with Tumors. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Tumors, and of other diseases and clinical conditions associated with VEGF.

[58469] The function of VEGF and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM500.1. Von hippel-lindau syndrome (VHL, Accession NP_000542.1) is another GAM7957 target gene, herein designated TARGET GENE. VHL BINDING SITE1 through VHL BINDING SITE3 are target binding sites found in untranslated regions of mRNA encoded by VHL, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of VHL BINDING SITE1 through VHL BINDING SITE3, desig-

nated SEQ ID:19054, SEQ ID:5896 and SEQ ID:17264 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58470] Another function of GAM7957 is therefore inhibition of Von hippel–lindau syndrome (VHL, Accession NP_000542.1), a gene which may control rna stability through the selective degradation of rna– bound proteins. and therefore is associated with Von hippel– lindau disease. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Von hippel– lindau disease, and of other diseases and clinical conditions associated with VHL.

[58471] The function of VHL and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM72.1.VIK (Accession NP_612503.1) is another GAM7957 target gene, herein designated TARGET GENE. VIK BINDING SITE is a target binding site found in the 3` untranslated region of multiple transcripts of mRNA encoded by VIK, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of VIK BINDING SITE, designated SEQ

ID:18691, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58472] Another function of GAM7957 is therefore inhibition of VIK (Accession NP_612503.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with VIK.

[58473] VIPL (Accession NP_110432.1) is another GAM7957 target gene, herein designated TARGET GENE. VIPL BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by VIPL, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of VIPL BINDING SITE, designated SEQ ID:19197, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58474] Another function of GAM7957 is therefore inhibition of VIPL (Accession NP_110432.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with VIPL.

[58475] VprBP (Accession NP_055518.1) is another GAM7957 target gene, herein designated TARGET GENE. VprBP BINDING SITE is a target binding site found in the 3' untranslated

region of mRNA encoded by VprBP, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of VprBP BINDING SITE, designated SEQ ID:5044, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58476] Another function of GAM7957 is therefore inhibition of VprBP (Accession NP_055518.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with VprBP.

[58477] Vacuolar protein sorting 4b (yeast) (VPS4B, Accession NP_004860.2) is another GAM7957 target gene, herein designated TARGET GENE. VPS4B BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by VPS4B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of VPS4B BINDING SITE, designated SEQ ID:10439, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58478] Another function of GAM7957 is therefore inhibition of

Vacuolar protein sorting 4b (yeast) (VPS4B, Accession NP_004860.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with VPS4B.

[58479] Williams-beuren syndrome chromosome region 1 (WBSCR1, Accession NP_114381.1) is another GAM7957 target gene, herein designated TARGET GENE. WBSCR1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by WBSCR1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of WBSCR1 BINDING SITE, designated SEQ ID:8562, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58480] Another function of GAM7957 is therefore inhibition of Williams-beuren syndrome chromosome region 1 (WBSCR1, Accession NP_114381.1), a gene which stimulates protein translation and therefore may be associated with Williams syndrome. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Williams syndrome, and of other diseases and clinical conditions

associated with WBSCR1.

[58481] The function of WBSCR1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM47.1. Williams-beuren syndrome chromosome region 1 (WBSCR1, Accession NP_071496.1) is another GAM7957 target gene, herein designated TARGET GENE. WBSCR1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by WBSCR1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of WBSCR1 BINDING SITE, designated SEQ ID:8562, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58482] Another function of GAM7957 is therefore inhibition of Williams-beuren syndrome chromosome region 1 (WBSCR1, Accession NP_071496.1), a gene which stimulates protein translation and therefore may be associated with Williams syndrome. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of Williams syndrome, and of other diseases and clinical conditions

associated with WBSCR1.

[58483] The function of WBSCR1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM47.1. Williams beuren syndrome chromosome region 21 (WBSCR21, Accession NP_112585.2) is another GAM7957 target gene, herein designated TARGET GENE. WBSCR21 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by WBSCR21, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of WBSCR21 BINDING SITE, designated SEQ ID:15303, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58484] Another function of GAM7957 is therefore inhibition of Williams beuren syndrome chromosome region 21 (WBSCR21, Accession NP_112585.2). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with WBSCR21.

[58485] Williams beuren syndrome chromosome region 21

(WBSCR21, Accession NP_683710.1) is another GAM7957 target gene, herein designated TARGET GENE. WBSCR21 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by WBSCR21, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of WBSCR21 BINDING SITE, designated SEQ ID:15303, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58486] Another function of GAM7957 is therefore inhibition of Williams beuren syndrome chromosome region 21 (WBSCR21, Accession NP_683710.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with WBSCR21.

[58487] Williams beuren syndrome chromosome region 21 (WBSCR21, Accession NP_683711.1) is another GAM7957 target gene, herein designated TARGET GENE. WBSCR21 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by WBSCR21, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of WBSCR21 BINDING SITE, designated SEQ ID:15303, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58488] Another function of GAM7957 is therefore inhibition of Williams beuren syndrome chromosome region 21 (WBSCR21, Accession NP_683711.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with WBSCR21.

[58489] Williams beuren syndrome chromosome region 21 (WBSCR21, Accession NP_683713.1) is another GAM7957 target gene, herein designated TARGET GENE. WBSCR21 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by WBSCR21, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of WBSCR21 BINDING SITE, designated SEQ ID:15303, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ

ID:297.

[58490] Another function of GAM7957 is therefore inhibition of Williams beuren syndrome chromosome region 21 (WBSCR21, Accession NP_683713.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with WB-SCR21.

[58491] Williams-beuren syndrome chromosome region 23 (WBSCR23, Accession NP_079318.1) is another GAM7957 target gene, herein designated TARGET GENE. WBSCR23 BINDING SITE1 and WBSCR23 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by WBSCR23, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of WBSCR23 BINDING SITE1 and WB-SCR23 BINDING SITE2, designated SEQ ID:19838 and SEQ ID:14797 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58492] Another function of GAM7957 is therefore inhibition of Williams-beuren syndrome chromosome region 23 (WBSCR23, Accession NP_079318.1) . Accordingly, utilities

of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with WB-SCR23.

[58493] WDR23 (Accession NP_079506.3) is another GAM7957 target gene, herein designated TARGET GENE. WDR23 BINDING SITE1 and WDR23 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by WDR23, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of WDR23 BINDING SITE1 and WDR23 BINDING SITE2, designated SEQ ID:14277 and SEQ ID:14277 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58494] Another function of GAM7957 is therefore inhibition of WDR23 (Accession NP_079506.3) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with WDR23.

[58495] WDR23 (Accession NP_079506.3) is another GAM7957 target gene, herein designated TARGET GENE. WDR23 BINDING SITE1 and WDR23 BINDING SITE2 are target binding sites found in untranslated regions of multiple tran-

scripts of mRNA encoded by WDR23, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of WDR23 BINDING SITE1 and WDR23 BINDING SITE2, designated SEQ ID:10486 and SEQ ID:10486 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58496] Another function of GAM7957 is therefore inhibition of WDR23 (Accession NP_079506.3) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with WDR23.

[58497] WIG1 (Accession NP_689426.1) is another GAM7957 target gene, herein designated TARGET GENE. WIG1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by WIG1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of WIG1 BINDING SITE, designated SEQ ID:15343, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58498] Another function of GAM7957 is therefore inhibition of

WIG1 (Accession NP_689426.1), a gene which is a sensor of cellular stress conditions including oncogenic activation, DNA damage and hypoxia. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with WIG1.

[58499] The function of WIG1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM347.2. WIG1 (Accession NP_071915.1) is another GAM7957 target gene, herein designated TARGET GENE. WIG1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by WIG1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of WIG1 BINDING SITE, designated SEQ ID:15343, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58500] Another function of GAM7957 is therefore inhibition of WIG1 (Accession NP_071915.1), a gene which is a sensor of cellular stress conditions including oncogenic activation, DNA damage and hypoxia. Accordingly, utilities of

GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with WIG1.

[58501] The function of WIG1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM347.2. Wingless-type mmtv integration site family, member 7b (WNT7B, Accession NP_478679.1) is another GAM7957 target gene, herein designated TARGET GENE. WNT7B BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by WNT7B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of WNT7B BINDING SITE, designated SEQ ID:1621, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58502] Another function of GAM7957 is therefore inhibition of Wingless-type mmtv integration site family, member 7b (WNT7B, Accession NP_478679.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with WNT7B.

[58503] Wingless-type mmtv integration site family, member 8b (WNT8B, Accession NP_003384.1) is another GAM7957

target gene, herein designated TARGET GENE. WNT8B BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by WNT8B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of WNT8B BINDING SITE, designated SEQ ID:3133, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58504] Another function of GAM7957 is therefore inhibition of Wingless-type mmtv integration site family, member 8b (WNT8B, Accession NP_003384.1), a gene which is the ligand for members of the frizzled family of seven transmembrane receptors and may play an important role in the development and differentiation of certain forebrain structures. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with WNT8B.

[58505] The function of WNT8B and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM223.1.X-ray repair complementing defective repair in chinese hamster cells 2 (XRCC2, Accession

NP_005422.1) is another GAM7957 target gene, herein designated TARGET GENE. XRCC2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by XRCC2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of XRCC2 BINDING SITE, designated SEQ ID:15223, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58506] Another function of GAM7957 is therefore inhibition of X-ray repair complementing defective repair in chinese hamster cells 2 (XRCC2, Accession NP_005422.1), a gene which involves in the homologous recombination repair (hrr) pathway of double-stranded dna. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with XRCC2.

[58507] The function of XRCC2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM72.1.YEA (Accession NP_116215.1) is another GAM7957 target gene, herein designated TARGET GENE.

YEA BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by YEA, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of YEA BINDING SITE, designated SEQ ID:7319, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58508] Another function of GAM7957 is therefore inhibition of YEA (Accession NP_116215.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with YEA.

[58509] Yme1-like 1 (*s. cerevisiae*) (YME1L1, Accession NP_055078.1) is another GAM7957 target gene, herein designated TARGET GENE. YME1L1 BINDING SITE1 and YME1L1 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by YME1L1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of YME1L1 BINDING SITE1 and YME1L1 BINDING SITE2, designated SEQ ID:9763 and SEQ ID:9763 respectively, to the nucleotide sequence of

GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58510] Another function of GAM7957 is therefore inhibition of Yme1-like 1 (*s. cerevisiae*) (YME1L1, Accession NP_055078.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with YME1L1.

[58511] Yme1-like 1 (*s. cerevisiae*) (YME1L1, Accession NP_055078.1) is another GAM7957 target gene, herein designated TARGET GENE. YME1L1 BINDING SITE1 and YME1L1 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by YME1L1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of YME1L1 BINDING SITE1 and YME1L1 BINDING SITE2, designated SEQ ID:18286 and SEQ ID:18286 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58512] Another function of GAM7957 is therefore inhibition of Yme1-like 1 (*s. cerevisiae*) (YME1L1, Accession NP_055078.1) . Accordingly, utilities of GAM7957 include

diagnosis, prevention and treatment of diseases and clinical conditions associated with YME1L1.

[58513] ZADH1 (Accession NP_689657.1) is another GAM7957 target gene, herein designated TARGET GENE. ZADH1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZADH1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZADH1 BINDING SITE, designated SEQ ID:9120, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58514] Another function of GAM7957 is therefore inhibition of ZADH1 (Accession NP_689657.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZADH1.

[58515] ZAK (Accession NP_598407.1) is another GAM7957 target gene, herein designated TARGET GENE. ZAK BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by ZAK, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide se-

quences of ZAK BINDING SITE, designated SEQ ID:13065, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58516] Another function of GAM7957 is therefore inhibition of ZAK (Accession NP_598407.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZAK.

[58517] ZBTB2 (Accession NP_065912.1) is another GAM7957 target gene, herein designated TARGET GENE. ZBTB2 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by ZBTB2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZBTB2 BINDING SITE, designated SEQ ID:15154, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58518] Another function of GAM7957 is therefore inhibition of ZBTB2 (Accession NP_065912.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZBTB2.

[58519] ZFD25 (Accession NP_057304.1) is another GAM7957 target gene, herein designated TARGET GENE. ZFD25 BIND-

ING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZFD25, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZFD25 BINDING SITE, designated SEQ ID:19287, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58520] Another function of GAM7957 is therefore inhibition of ZFD25 (Accession NP_057304.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZFD25.

[58521] ZFP106 (Accession NP_071918.1) is another GAM7957 target gene, herein designated TARGET GENE. ZFP106 BINDING SITE1 and ZFP106 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by ZFP106, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZFP106 BINDING SITE1 and ZFP106 BINDING SITE2, designated SEQ ID:13058 and SEQ ID:17808 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also design-

nated SEQ ID:297.

[58522] Another function of GAM7957 is therefore inhibition of ZFP106 (Accession NP_071918.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZFP106.

[58523] ZFP30 (Accession NP_055713.1) is another GAM7957 target gene, herein designated TARGET GENE. ZFP30 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZFP30, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZFP30 BINDING SITE, designated SEQ ID:14388, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58524] Another function of GAM7957 is therefore inhibition of ZFP30 (Accession NP_055713.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZFP30.

[58525] Zinc finger protein 91 homolog (mouse) (ZFP91, Accession NP_444251.1) is another GAM7957 target gene, herein designated TARGET GENE. ZFP91 BINDING SITE is a target binding site found in the 3' untranslated region of multi-

ple transcripts of mRNA encoded by ZFP91, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZFP91 BINDING SITE, designated SEQ ID:883, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58526] Another function of GAM7957 is therefore inhibition of Zinc finger protein 91 homolog (mouse) (ZFP91, Accession NP_444251.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZFP91.

[58527] Zinc finger, imprinted 3 (ZIM3, Accession NP_443114.1) is another GAM7957 target gene, herein designated TARGET GENE. ZIM3 BINDING SITE1 and ZIM3 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by ZIM3, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZIM3 BINDING SITE1 and ZIM3 BINDING SITE2, designated SEQ ID:19880 and SEQ ID:10267 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also design-

nated SEQ ID:297.

[58528] Another function of GAM7957 is therefore inhibition of Zinc finger, imprinted 3 (ZIM3, Accession NP_443114.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZIM3.

[58529] Zinc finger protein 11b (kox 2) (ZNF11B, Accession NP_008886.1) is another GAM7957 target gene, herein designated TARGET GENE. ZNF11B BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZNF11B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF11B BINDING SITE, designated SEQ ID:15224, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58530] Another function of GAM7957 is therefore inhibition of Zinc finger protein 11b (kox 2) (ZNF11B, Accession NP_008886.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF11B.

[58531] Zinc finger protein 14 (kox 6) (ZNF14, Accession

NP_066358.1) is another GAM7957 target gene, herein designated TARGET GENE. ZNF14 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZNF14, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF14 BINDING SITE, designated SEQ ID:5303, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58532] Another function of GAM7957 is therefore inhibition of Zinc finger protein 14 (kox 6) (ZNF14, Accession NP_066358.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF14.

[58533] Zinc finger protein 197 (ZNF197, Accession NP_008922.1) is another GAM7957 target gene, herein designated TARGET GENE. ZNF197 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZNF197, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF197 BINDING SITE, designated

SEQ ID:2173, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58534] Another function of GAM7957 is therefore inhibition of Zinc finger protein 197 (ZNF197, Accession NP_008922.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF197.

[58535] Zinc finger protein 264 (ZNF264, Accession NP_003408.1) is another GAM7957 target gene, herein designated TARGET GENE. ZNF264 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZNF264, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF264 BINDING SITE, designated SEQ ID:2367, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58536] Another function of GAM7957 is therefore inhibition of Zinc finger protein 264 (ZNF264, Accession NP_003408.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical condi-

tions associated with ZNF264.

[58537] Zinc finger protein 271 (ZNF271, Accession NP_006620.2) is another GAM7957 target gene, herein designated TARGET GENE. ZNF271 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZNF271, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF271 BINDING SITE, designated SEQ ID:13091, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58538] Another function of GAM7957 is therefore inhibition of Zinc finger protein 271 (ZNF271, Accession NP_006620.2). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF271.

[58539] Zinc finger protein 297b (ZNF297B, Accession NP_054726.1) is another GAM7957 target gene, herein designated TARGET GENE. ZNF297B BINDING SITE1 and ZNF297B BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by ZNF297B, corresponding to target binding sites such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF297B BINDING SITE1 and ZNF297B BINDING SITE2, designated SEQ ID:3235 and SEQ ID:15000 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58540] Another function of GAM7957 is therefore inhibition of Zinc finger protein 297b (ZNF297B, Accession NP_054726.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF297B.

[58541] ZNF333 (Accession NP_115809.1) is another GAM7957 target gene, herein designated TARGET GENE. ZNF333 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZNF333, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF333 BINDING SITE, designated SEQ ID:12792, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58542] Another function of GAM7957 is therefore inhibition of ZNF333 (Accession NP_115809.1) . Accordingly, utilities

of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF333.

[58543] Zinc finger protein 339 (ZNF339, Accession NP_067043.1) is another GAM7957 target gene, herein designated TARGET GENE. ZNF339 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZNF339, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF339 BINDING SITE, designated SEQ ID:2484, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58544] Another function of GAM7957 is therefore inhibition of Zinc finger protein 339 (ZNF339, Accession NP_067043.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF339.

[58545] Zinc finger protein 33a (kox 31) (ZNF33A, Accession NP_008905.1) is another GAM7957 target gene, herein designated TARGET GENE. ZNF33A BINDING SITE is a target binding site found in the 3' untranslated region of

mRNA encoded by ZNF33A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF33A BINDING SITE, designated SEQ ID:19246, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58546] Another function of GAM7957 is therefore inhibition of Zinc finger protein 33a (kox 31) (ZNF33A, Accession NP_008905.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF33A.

[58547] Zinc finger protein 347 (ZNF347, Accession NP_115973.1) is another GAM7957 target gene, herein designated TARGET GENE. ZNF347 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZNF347, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF347 BINDING SITE, designated SEQ ID:9422, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58548] Another function of GAM7957 is therefore inhibition of Zinc finger protein 347 (ZNF347, Accession NP_115973.1). Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF347.

[58549] Zinc finger protein 36 (kox 18) (ZNF36, Accession XP_168302.1) is another GAM7957 target gene, herein designated TARGET GENE. ZNF36 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZNF36, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF36 BINDING SITE, designated SEQ ID:10435, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58550] Another function of GAM7957 is therefore inhibition of Zinc finger protein 36 (kox 18) (ZNF36, Accession XP_168302.1), a gene which may be involved in transcriptional regulation. Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF36.

[58551] The function of ZNF36 and its association with various

diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM31.1.ZNF409 (Accession NP_055709.1) is another GAM7957 target gene, herein designated TARGET GENE. ZNF409 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZNF409, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF409 BINDING SITE, designated SEQ ID:15207, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58552] Another function of GAM7957 is therefore inhibition of ZNF409 (Accession NP_055709.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF409.

[58553] ZNF426 (Accession NP_077011.1) is another GAM7957 target gene, herein designated TARGET GENE. ZNF426 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZNF426, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of ZNF426 BINDING SITE, designated SEQ ID:9759, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58554] Another function of GAM7957 is therefore inhibition of ZNF426 (Accession NP_077011.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF426.

[58555] ZNF430 (Accession NP_079465.1) is another GAM7957 target gene, herein designated TARGET GENE. ZNF430 BINDING SITE1 and ZNF430 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by ZNF430, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF430 BINDING SITE1 and ZNF430 BINDING SITE2, designated SEQ ID:10917 and SEQ ID:15089 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58556] Another function of GAM7957 is therefore inhibition of ZNF430 (Accession NP_079465.1) . Accordingly, utilities

of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF430.

[58557] ZNF431 (Accession XP_086098.2) is another GAM7957 target gene, herein designated TARGET GENE. ZNF431 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZNF431, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF431 BINDING SITE, designated SEQ ID:7868, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58558] Another function of GAM7957 is therefore inhibition of ZNF431 (Accession XP_086098.2) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF431.

[58559] ZNF432 (Accession NP_055465.1) is another GAM7957 target gene, herein designated TARGET GENE. ZNF432 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZNF432, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of ZNF432 BINDING SITE, designated SEQ ID:5251, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58560] Another function of GAM7957 is therefore inhibition of ZNF432 (Accession NP_055465.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF432.

[58561] ZNF440 (Accession NP_689570.1) is another GAM7957 target gene, herein designated TARGET GENE. ZNF440 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZNF440, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF440 BINDING SITE, designated SEQ ID:14055, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58562] Another function of GAM7957 is therefore inhibition of ZNF440 (Accession NP_689570.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

ZNF440.

[58563] ZNF444 (Accession NP_060807.1) is another GAM7957 target gene, herein designated TARGET GENE. ZNF444 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZNF444, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF444 BINDING SITE, designated SEQ ID:7772, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58564] Another function of GAM7957 is therefore inhibition of ZNF444 (Accession NP_060807.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF444.

[58565] ZNF450 (Accession NP_055612.1) is another GAM7957 target gene, herein designated TARGET GENE. ZNF450 BINDING SITE1 and ZNF450 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by ZNF450, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the

nucleotide sequences of ZNF450 BINDING SITE1 and ZNF450 BINDING SITE2, designated SEQ ID:6071 and SEQ ID:10867 respectively, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58566] Another function of GAM7957 is therefore inhibition of ZNF450 (Accession NP_055612.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF450.

[58567] Zinc finger protein 74 (cos52) (ZNF74, Accession NP_003417.1) is another GAM7957 target gene, herein designated TARGET GENE. ZNF74 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZNF74, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF74 BINDING SITE, designated SEQ ID:12062, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58568] Another function of GAM7957 is therefore inhibition of Zinc finger protein 74 (cos52) (ZNF74, Accession

NP_003417.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF74.

[58569] Zinc finger protein 91 (hpf7, htf10) (ZNF91, Accession NP_003421.1) is another GAM7957 target gene, herein designated TARGET GENE. ZNF91 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZNF91, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF91 BINDING SITE, designated SEQ ID:15343, to the nucleotide sequence of GAM7957 RNA, herein designated GAM RNA, also designated SEQ ID:297.

[58570] Another function of GAM7957 is therefore inhibition of Zinc finger protein 91 (hpf7, htf10) (ZNF91, Accession NP_003421.1) . Accordingly, utilities of GAM7957 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF91.

[58571]

[58572] Fig. 8 further provides a conceptual description of a novel bioinformatically detected of the present invention, referred to here as Genomic Address Messenger 8145

(GAM8145), which modulates expression of respective target genes thereof, the function and utility of which target genes is known in the art.

[58573] GAM8145 is a novel bioinformatically detected regulatory, non protein coding, micro RNA (miRNA) gene. The method by which GAM8145 was detected is described hereinabove with reference to Figs. 8–15.

[58574] GAM8145 gene, herein designated GAM GENE, and GAM8145 target gene, herein designated TARGET GENE, are human genes contained in the human genome.

[58575] GAM8145 gene encodes a GAM8145 precursor RNA, herein designated GAM PRECURSOR RNA. Similar to other miRNA genes, and unlike most ordinary genes, GAM8145 precursor RNA does not encode a protein. A nucleotide sequence identical or highly similar to the nucleotide sequence of GAM8145 precursor RNA is designated SEQ ID:112, and is provided hereinbelow with reference to the sequence listing part.

[58576] GAM8145 precursor RNA folds onto itself, forming GAM8145 folded precursor RNA, herein designated GAM FOLDED PRECURSOR RNA, which has a two-dimensional `hairpin structure`. As is well known in the art, this `hairpin structure`, is typical of RNA encoded by miRNA

genes, and is due to the fact that the nucleotide sequence of the first half of the RNA encoded by a miRNA gene is an accurate or partial inversed-reversed sequence of the nucleotide sequence of the second half thereof.

[58577] GAM8145 precursor RNA folds onto itself, forming GAM8145 folded precursor RNA, herein designated GAM FOLDED PRECURSOR RNA, which has a two-dimensional `hairpin structure`. As is well known in the art, this `hairpin structure`, is typical of RNA encoded by miRNA genes, and is due to the fact that the nucleotide sequence of the first half of the RNA encoded by a miRNA gene is an accurate or partial reverse-complementary sequence of the nucleotide sequence of the second half thereof.

[58578] Nucleotide sequence of GAM8145 precursor RNA, designated SEQ-ID: 112, and a schematic representation of a predicted secondary folding of GAM8145 folded precursor RNA are further described with reference to Table 2, hereby incorporated by reference.

[58579] An enzyme complex designated DICER COMPLEX, `dices` the GAM8145 folded precursor RNA into GAM8145 RNA, herein designated GAM RNA, a single stranded ~22 nt long RNA segment. As is known in the art, `dicing` of a hairpin structured RNA precursor product into a short

~22nt RNA segment is catalyzed by an enzyme complex comprising an enzyme called Dicer together with other necessary proteins. A probable (GAM Prediction Accuracy Group: C) nucleotide sequence of GAM8145 RNA is designated SEQ ID:328, and is provided hereinbelow with references to the sequence listing part and Table 3, hereby incorporated by reference.

[58580] GAM8145 target gene, herein designated TARGET GENE, encodes a corresponding messenger RNA, GAM8145 target RNA, herein designated GAM TARGET RNA. GAM8145 target RNA comprises three regions, as is typical of mRNA of a protein coding gene: a 5' untranslated region, a protein coding region and a 3' untranslated region, designated 5'UTR, PROTEIN CODING and 3'UTR respectively.

[58581] GAM8145 RNA, herein designated GAM RNA, binds complementarily to one or more target binding sites located in untranslated regions of GAM8145 target RNA, herein designated GAM TARGET RNA. This complementary binding is due to the fact that the nucleotide sequence of GAM8145 RNA is an accurate or a partial inversed-reversed sequence of the nucleotide sequence of each of the target binding sites. As an illustration, Fig. 8 shows three such target binding sites, designated BINDING SITE I, BINDING

SITE II and BINDING SITE III respectively. It is appreciated that the number of target binding sites shown in Fig. 8 is meant as an illustration only, and is not meant to be limiting. GAM8145 RNA may have a different number of target binding sites in untranslated regions of a GAM8145 target RNA. It is further appreciated that while Fig. 8 depicts target binding sites in the 3'UTR region, this is meant as an example only; these target binding sites may be located in the 3'UTR region, the 5'UTR region, or in both 3'UTR and 5'UTR regions.

[58582] The complementary binding of GAM8145 RNA, herein designated GAM RNA, to target binding sites on GAM8145 target RNA, herein designated GAM TARGET RNA, such as BINDING SITE I, BINDING SITE II and BINDING SITE III, inhibits translation of GAM8145 target RNA into GAM8145 target protein, herein designated GAM TARGET PROTEIN. GAM target protein is therefore outlined by a broken line.

[58583] It is appreciated that GAM8145 target gene, herein designated TARGET GENE, in fact represents a plurality of GAM8145 target genes. The mRNA of each one of this plurality of GAM8145 target genes comprises one or more target binding sites, each having a nucleotide sequence which is at least partly complementary to GAM8145 RNA,

herein designated GAM RNA, and which when bound by GAM8145 RNA causes inhibition of translation of respective one or more GAM8145 target proteins.

[58584] It is further appreciated by one skilled in the art that the mode of translational inhibition illustrated by Fig. 8 with specific reference to translational inhibition exerted by GAM8145 gene, herein designated GAM GENE, on one or more GAM8145 target genes, herein collectively designated TARGET GENE, is common to other known miRNA genes. As mentioned hereinabove with reference to the background section, although a specific complementary binding site has been demonstrated only for some of the known miRNA genes (primarily Lin-4 and Let-7), all other recently discovered miRNA genes are also believed by those skilled in the art to modulate expression of other genes by complementary binding, although specific complementary binding sites of these other miRNA genes have not yet been found (Ruvkun G., Perspective: Glimpses of a tiny RNA world, Science 294,779 (2001)).

[58585] It is appreciated that specific functions and accordingly utilities of GAM8145 correlate with, and may be deduced from, the identity of the target genes which GAM8145 binds and inhibits, and the function of these target genes,

as elaborated hereinbelow.

[58586]

[58587]

[58588] (Accession NP_061085.1) is a GAM8145 target gene, herein designated TARGET GENE. BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BINDING SITE, designated SEQ ID:1692, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58589] A function of GAM8145 is therefore inhibition of (Accession NP_061085.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with .

[58590] Adrenergic, alpha-2a-, receptor (ADRA2A, Accession NP_000672.2) is another GAM8145 target gene, herein designated TARGET GENE. ADRA2A BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ADRA2A, corresponding to a target

binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ADRA2A BINDING SITE, designated SEQ ID:4823, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58591] Another function of GAM8145 is therefore inhibition of Adrenergic, alpha-2a-, receptor (ADRA2A, Accession NP_000672.2), a gene which mediates the effects of epinephrine and norepinephrine. Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ADRA2A.

[58592] The function of ADRA2A and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM450.2. Adrenergic, beta-1-, receptor (ADRB1, Accession NP_000675.1) is another GAM8145 target gene, herein designated TARGET GENE. ADRB1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ADRB1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ADRB1 BINDING

SITE, designated SEQ ID:10737, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58593] Another function of GAM8145 is therefore inhibition of Adrenergic, beta-1-, receptor (ADRB1, Accession NP_000675.1), a gene which stimulates adenylyl cyclase activity and mediates catecholamine function. Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ADRB1.

[58594] The function of ADRB1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM1045.1. Arylsulfatase b (ARSB, Accession NP_000037.1) is another GAM8145 target gene, herein designated TARGET GENE. ARSB BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ARSB, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ARSB BINDING SITE, designated SEQ ID:9103, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ

ID:328.

[58595] Another function of GAM8145 is therefore inhibition of Arylsulfatase b (ARSB, Accession NP_000037.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ARSB.

[58596] Atpase, h⁺ transporting, lysosomal interacting protein 2 (ATP6IP2, Accession NP_005756.2) is another GAM8145 target gene, herein designated TARGET GENE. ATP6IP2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ATP6IP2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ATP6IP2 BINDING SITE, designated SEQ ID:7285, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58597] Another function of GAM8145 is therefore inhibition of Atpase, h⁺ transporting, lysosomal interacting protein 2 (ATP6IP2, Accession NP_005756.2) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ATP6IP2.

[58598] BSPRY (Accession NP_060158.1) is another GAM8145 target gene, herein designated TARGET GENE. BSPRY BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by BSPRY, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BSPRY BINDING SITE, designated SEQ ID:5340, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58599] Another function of GAM8145 is therefore inhibition of BSPRY (Accession NP_060158.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BSPRY.

[58600] Chromosome 1 open reading frame 1 (C1orf1, Accession NP_001204.1) is another GAM8145 target gene, herein designated TARGET GENE. C1orf1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C1orf1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C1orf1 BINDING SITE, designated SEQ ID:14716, to the nucleotide sequence of GAM8145

RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58601] Another function of GAM8145 is therefore inhibition of Chromosome 1 open reading frame 1 (C1orf1, Accession NP_001204.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C1orf1.

[58602] Chromosome 1 open reading frame 22 (C1orf22, Accession NP_079467.2) is another GAM8145 target gene, herein designated TARGET GENE. C1orf22 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C1orf22, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C1orf22 BINDING SITE, designated SEQ ID:10321, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58603] Another function of GAM8145 is therefore inhibition of Chromosome 1 open reading frame 22 (C1orf22, Accession NP_079467.2) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C1orf22.

[58604] C1QDC1 (Accession NP_076414.2) is another GAM8145 target gene, herein designated TARGET GENE. C1QDC1 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by C1QDC1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C1QDC1 BINDING SITE, designated SEQ ID:11118, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58605] Another function of GAM8145 is therefore inhibition of C1QDC1 (Accession NP_076414.2) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C1QDC1.

[58606] C1QDC1 (Accession NP_115532.1) is another GAM8145 target gene, herein designated TARGET GENE. C1QDC1 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by C1QDC1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of C1QDC1 BINDING SITE, designated SEQ ID:11118, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58607] Another function of GAM8145 is therefore inhibition of C1QDC1 (Accession NP_115532.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C1QDC1.

[58608] Chromosome 20 open reading frame 72 (C20orf72, Accession NP_443097.1) is another GAM8145 target gene, herein designated TARGET GENE. C20orf72 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C20orf72, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C20orf72 BINDING SITE, designated SEQ ID:3280, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58609] Another function of GAM8145 is therefore inhibition of Chromosome 20 open reading frame 72 (C20orf72, Accession NP_443097.1) . Accordingly, utilities of GAM8145

include diagnosis, prevention and treatment of diseases and clinical conditions associated with C20orf72.

[58610] C6orf5 (Accession NP_056339.2) is another GAM8145 target gene, herein designated TARGET GENE. C6orf5 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C6orf5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C6orf5 BINDING SITE, designated SEQ ID:4879, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58611] Another function of GAM8145 is therefore inhibition of C6orf5 (Accession NP_056339.2) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C6orf5.

[58612] Chaperone, abc1 activity of bc1 complex like (s. pombe) (CABC1, Accession NP_064632.1) is another GAM8145 target gene, herein designated TARGET GENE. CABC1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CABC1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of CABC1 BINDING SITE, designated SEQ ID:14186, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58613] Another function of GAM8145 is therefore inhibition of Chaperone, abc1 activity of bc1 complex like (s. pombe) (CABC1, Accession NP_064632.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CABC1.

[58614] Calcium channel, voltage-dependent, gamma subunit 3 (CACNG3, Accession NP_006530.1) is another GAM8145 target gene, herein designated TARGET GENE. CACNG3 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by CACNG3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CACNG3 BINDING SITE, designated SEQ ID:8825, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58615] Another function of GAM8145 is therefore inhibition of Calcium channel, voltage-dependent, gamma subunit 3 (CACNG3, Accession NP_006530.1), a gene which is

thought to stabilize the calcium channel in an inactivated state. Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CACNG3.

[58616] The function of CACNG3 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM335.1. Calpain 1, (mu/i) large subunit (CAPN1, Accession NP_005177.2) is another GAM8145 target gene, herein designated TARGET GENE. CAPN1 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by CAPN1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CAPN1 BINDING SITE, designated SEQ ID:3309, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58617] Another function of GAM8145 is therefore inhibition of Calpain 1, (mu/i) large subunit (CAPN1, Accession NP_005177.2), a gene which is an intracellular protease that requires calcium for its catalytic activity. Accordingly, utilities of GAM8145 include diagnosis, prevention and

treatment of diseases and clinical conditions associated with CAPN1.

[58618] The function of CAPN1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM41.1. Caspase 2, apoptosis-related cysteine protease (neural precursor cell expressed, developmentally down-regulated 2) (CASP2, Accession NP_116764.1) is another GAM8145 target gene, herein designated TARGET GENE. CASP2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CASP2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CASP2 BINDING SITE, designated SEQ ID:7205, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58619] Another function of GAM8145 is therefore inhibition of Caspase 2, apoptosis-related cysteine protease (neural precursor cell expressed, developmentally down-regulated 2) (CASP2, Accession NP_116764.1), a gene which involves in the activation cascade of caspases responsible

for apoptosis execution. Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CASP2.

[58620] The function of CASP2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM139.1. Caspase 2, apoptosis-related cysteine protease (neural precursor cell expressed, developmentally down-regulated 2) (CASP2, Accession NP_001215.1) is another GAM8145 target gene, herein designated TARGET GENE. CASP2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CASP2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CASP2 BINDING SITE, designated SEQ ID:7205, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58621] Another function of GAM8145 is therefore inhibition of Caspase 2, apoptosis-related cysteine protease (neural precursor cell expressed, developmentally down-regulated 2) (CASP2, Accession NP_001215.1), a gene which

involves in the activation cascade of caspases responsible for apoptosis execution. Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CASP2.

[58622] The function of CASP2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM139.1. Caspase 2, apoptosis-related cysteine protease (neural precursor cell expressed, developmentally down-regulated 2) (CASP2, Accession NP_116766.1) is another GAM8145 target gene, herein designated TARGET GENE. CASP2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CASP2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CASP2 BINDING SITE, designated SEQ ID:7205, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58623] Another function of GAM8145 is therefore inhibition of Caspase 2, apoptosis-related cysteine protease (neural precursor cell expressed, developmentally down-reg-

ulated 2) (CASP2, Accession NP_116766.1), a gene which involves in the activation cascade of caspases responsible for apoptosis execution. Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CASP2.

[58624] The function of CASP2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM139.1. Caspase 2, apoptosis-related cysteine protease (neural precursor cell expressed, developmentally down-regulated 2) (CASP2, Accession NP_116765.1) is another GAM8145 target gene, herein designated TARGET GENE. CASP2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CASP2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CASP2 BINDING SITE, designated SEQ ID:7205, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58625] Another function of GAM8145 is therefore inhibition of Caspase 2, apoptosis-related cysteine protease (neural

precursor cell expressed, developmentally down-regulated 2) (CASP2, Accession NP_116765.1), a gene which involves in the activation cascade of caspases responsible for apoptosis execution. Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CASP2.

[58626] The function of CASP2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM139.1. Cd151 antigen (CD151, Accession NP_004348.2) is another GAM8145 target gene, herein designated TARGET GENE. CD151 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by CD151, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CD151 BINDING SITE, designated SEQ ID:12932, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58627] Another function of GAM8145 is therefore inhibition of Cd151 antigen (CD151, Accession NP_004348.2). Accordingly, utilities of GAM8145 include diagnosis, preven-

tion and treatment of diseases and clinical conditions associated with CD151.

[58628] CG012 (Accession XP_096710.1) is another GAM8145 target gene, herein designated TARGET GENE. CG012 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by CG012, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CG012 BINDING SITE, designated SEQ ID:2753, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58629] Another function of GAM8145 is therefore inhibition of CG012 (Accession XP_096710.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CG012.

[58630] Chk1 checkpoint homolog (s. pombe) (CHEK1, Accession NP_001265.1) is another GAM8145 target gene, herein designated TARGET GENE. CHEK1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CHEK1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the

nucleotide sequences of CHEK1 BINDING SITE, designated SEQ ID:15806, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58631] Another function of GAM8145 is therefore inhibition of Chk1 checkpoint homolog (*S. pombe*) (CHEK1, Accession NP_001265.1), a gene which a protein kinase that is required for the DNA damage checkpoint. Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CHEK1.

[58632] The function of CHEK1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM3154.1. Cytochrome c oxidase subunit viii (COX8, Accession NP_004065.1) is another GAM8145 target gene, herein designated TARGET GENE. COX8 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by COX8, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of COX8 BINDING SITE, designated SEQ ID:15358, to the nucleotide sequence of

GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58633] Another function of GAM8145 is therefore inhibition of Cytochrome c oxidase subunit viii (COX8, Accession NP_004065.1), a gene which is a nuclear- coded polypeptide chain of cytochrome c oxidase. Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with COX8.

[58634] The function of COX8 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM2154.1.DKFZp727A071 (Accession NP_689481.1) is another GAM8145 target gene, herein designated TARGET GENE. DKFZp727A071 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZp727A071, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp727A071 BINDING SITE, designated SEQ ID:18597, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58635] Another function of GAM8145 is therefore inhibition of

DKFZp727A071 (Accession NP_689481.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp727A071.

[58636] Dystrophia myotonica-containing wd repeat motif (DMWD, Accession XP_027569.1) is another GAM8145 target gene, herein designated TARGET GENE. DMWD BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DMWD, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DMWD BINDING SITE, designated SEQ ID:17090, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58637] Another function of GAM8145 is therefore inhibition of Dystrophia myotonica-containing wd repeat motif (DMWD, Accession XP_027569.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DMWD.

[58638] DPF3 (Accession NP_036206.1) is another GAM8145 target gene, herein designated TARGET GENE. DPF3 BINDING SITE is a target binding site found in the 3' untranslated

region of mRNA encoded by DPF3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DPF3 BINDING SITE, designated SEQ ID:15298, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58639] Another function of GAM8145 is therefore inhibition of DPF3 (Accession NP_036206.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DPF3.

[58640] Ells1 (Accession NP_690006.1) is another GAM8145 target gene, herein designated TARGET GENE. Ells1 BINDING SITE1 and Ells1 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by Ells1, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of Ells1 BINDING SITE1 and Ells1 BINDING SITE2, designated SEQ ID:19837 and SEQ ID:18457 respectively, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58641] Another function of GAM8145 is therefore inhibition of

Ells1 (Accession NP_690006.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with Ells1.

[58642] ERAP140 (Accession XP_059748.2) is another GAM8145 target gene, herein designated TARGET GENE. ERAP140 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ERAP140, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ERAP140 BINDING SITE, designated SEQ ID:7182, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58643] Another function of GAM8145 is therefore inhibition of ERAP140 (Accession XP_059748.2) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ERAP140.

[58644] F-box only protein 11 (FBXO11, Accession NP_061163.2) is another GAM8145 target gene, herein designated TARGET GENE. FBXO11 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by FBXO11, corresponding to a target

binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FBXO11 BINDING SITE, designated SEQ ID:11365, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58645] Another function of GAM8145 is therefore inhibition of F-box only protein 11 (FBXO11, Accession NP_061163.2) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FBXO11.

[58646] FLJ10460 (Accession NP_060567.1) is another GAM8145 target gene, herein designated TARGET GENE. FLJ10460 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ10460, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ10460 BINDING SITE, designated SEQ ID:455, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58647] Another function of GAM8145 is therefore inhibition of FLJ10460 (Accession NP_060567.1) . Accordingly, utilities

of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ10460.

[58648] FLJ11274 (Accession NP_060845.1) is another GAM8145 target gene, herein designated TARGET GENE. FLJ11274 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ11274, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ11274 BINDING SITE, designated SEQ ID:13401, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58649] Another function of GAM8145 is therefore inhibition of FLJ11274 (Accession NP_060845.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ11274.

[58650] FLJ20671 (Accession NP_060394.1) is another GAM8145 target gene, herein designated TARGET GENE. FLJ20671 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ20671, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20671 BINDING SITE, designated SEQ ID:11719, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58651] Another function of GAM8145 is therefore inhibition of FLJ20671 (Accession NP_060394.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20671.

[58652] FLJ23584 (Accession NP_078864.1) is another GAM8145 target gene, herein designated TARGET GENE. FLJ23584 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ23584, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ23584 BINDING SITE, designated SEQ ID:14763, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58653] Another function of GAM8145 is therefore inhibition of FLJ23584 (Accession NP_078864.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment

of diseases and clinical conditions associated with FLJ23584.

[58654] FLJ31882 (Accession NP_689673.1) is another GAM8145 target gene, herein designated TARGET GENE. FLJ31882 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ31882, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ31882 BINDING SITE, designated SEQ ID:3175, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58655] Another function of GAM8145 is therefore inhibition of FLJ31882 (Accession NP_689673.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ31882.

[58656] FLJ31952 (Accession NP_653283.1) is another GAM8145 target gene, herein designated TARGET GENE. FLJ31952 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ31952, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of FLJ31952 BINDING SITE, designated SEQ ID:15807, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58657] Another function of GAM8145 is therefore inhibition of FLJ31952 (Accession NP_653283.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ31952.

[58658] FLJ33996 (Accession NP_787090.1) is another GAM8145 target gene, herein designated TARGET GENE. FLJ33996 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ33996, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ33996 BINDING SITE, designated SEQ ID:10522, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58659] Another function of GAM8145 is therefore inhibition of FLJ33996 (Accession NP_787090.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

FLJ33996.

[58660] Forkhead box I2 (FOXL2, Accession NP_075555.1) is another GAM8145 target gene, herein designated TARGET GENE. FOXL2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FOXL2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FOXL2 BINDING SITE, designated SEQ ID:2486, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58661] Another function of GAM8145 is therefore inhibition of Forkhead box I2 (FOXL2, Accession NP_075555.1). Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FOXL2.

[58662] Fucosyltransferase 10 (alpha (1,3) fucosyltransferase) (FUT10, Accession NP_116053.2) is another GAM8145 target gene, herein designated TARGET GENE. FUT10 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FUT10, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of FUT10 BINDING SITE, designated SEQ ID:3533, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58663] Another function of GAM8145 is therefore inhibition of Fucosyltransferase 10 (alpha (1,3) fucosyltransferase) (FUT10, Accession NP_116053.2) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FUT10.

[58664] GALNT13 (Accession XP_054951.3) is another GAM8145 target gene, herein designated TARGET GENE. GALNT13 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GALNT13, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GALNT13 BINDING SITE, designated SEQ ID:16038, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58665] Another function of GAM8145 is therefore inhibition of GALNT13 (Accession XP_054951.3) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

GALNT13.

[58666] Glucosaminyl (n-acetyl) transferase 2, i-branching enzyme (GCNT2, Accession NP_001482.1) is another GAM8145 target gene, herein designated TARGET GENE. GCNT2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by GCNT2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GCNT2 BINDING SITE, designated SEQ ID:12041, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58667] Another function of GAM8145 is therefore inhibition of Glucosaminyl (n-acetyl) transferase 2, i-branching enzyme (GCNT2, Accession NP_001482.1), a gene which converts linear into branched poly- n- acetyllactosamino- glycans. Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GCNT2.

[58668] The function of GCNT2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM205.2.Glucosaminyl (n-acetyl) transferase 2, i-branching enzyme (GCNT2, Accession NP_663624.1) is another GAM8145 target gene, herein designated TARGET GENE. GCNT2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by GCNT2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GCNT2 BINDING SITE, designated SEQ ID:12041, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58669] Another function of GAM8145 is therefore inhibition of Glucosaminyl (n-acetyl) transferase 2, i-branching enzyme (GCNT2, Accession NP_663624.1), a gene which converts linear into branched poly- n- acetyllactosaminoglycans. Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GCNT2.

[58670] The function of GCNT2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM205.2.Glucosaminyl (n-acetyl) transferase 2, i-

branching enzyme (GCNT2, Accession NP_663630.1) is another GAM8145 target gene, herein designated TARGET GENE. GCNT2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by GCNT2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GCNT2 BINDING SITE, designated SEQ ID:12041, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58671] Another function of GAM8145 is therefore inhibition of Glucosaminyl (n-acetyl) transferase 2, i-branching enzyme (GCNT2, Accession NP_663630.1), a gene which converts linear into branched poly- n- acetyllactosaminoglycans. Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GCNT2.

[58672] The function of GCNT2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM205.2. Glycosylphosphatidylinositol specific phospholipase d1 (GPLD1, Accession NP_803436.1) is another

GAM8145 target gene, herein designated TARGET GENE. GPLD1 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by GPLD1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GPLD1 BINDING SITE, designated SEQ ID:1243, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58673] Another function of GAM8145 is therefore inhibition of Glycosylphosphatidylinositol specific phospholipase d1 (GPLD1, Accession NP_803436.1), a gene which hydrolyses the inositol phosphate linkage in proteins anchored by phosphatidylinositol glycans to release these proteins from the membrane. Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GPLD1.

[58674] The function of GPLD1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM44.1. Glycosylphosphatidylinositol specific phospholipase d1 (GPLD1, Accession NP_001494.2) is another

GAM8145 target gene, herein designated TARGET GENE. GPLD1 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by GPLD1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GPLD1 BINDING SITE, designated SEQ ID:1243, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58675] Another function of GAM8145 is therefore inhibition of Glycosylphosphatidylinositol specific phospholipase d1 (GPLD1, Accession NP_001494.2), a gene which hydrolyses the inositol phosphate linkage in proteins anchored by phosphatidylinositol glycans to release these proteins from the membrane. Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GPLD1.

[58676] The function of GPLD1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM44.1.G protein-coupled receptor 30 (GPR30, Accession NP_001496.1) is another GAM8145 target gene,

herein designated TARGET GENE. GPR30 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by GPR30, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GPR30 BINDING SITE, designated SEQ ID:7529, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58677] Another function of GAM8145 is therefore inhibition of G protein-coupled receptor 30 (GPR30, Accession NP_001496.1), a gene which receives chemical signals in cell communication in both CNS and peripheral tissues. Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GPR30.

[58678] The function of GPR30 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM475.2.G protein-coupled receptor 55 (GPR55, Accession NP_005674.1) is another GAM8145 target gene, herein designated TARGET GENE. GPR55 BINDING SITE is a target binding site found in the 3' untranslated region of

mRNA encoded by GPR55, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GPR55 BINDING SITE, designated SEQ ID:8432, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58679] Another function of GAM8145 is therefore inhibition of G protein-coupled receptor 55 (GPR55, Accession NP_005674.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GPR55.

[58680] General transcription factor iif, polypeptide 1, 74kda (GTF2F1, Accession NP_002087.1) is another GAM8145 target gene, herein designated TARGET GENE. GTF2F1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GTF2F1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GTF2F1 BINDING SITE, designated SEQ ID:8940, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58681] Another function of GAM8145 is therefore inhibition of General transcription factor iif, polypeptide 1, 74kda (GTF2F1, Accession NP_002087.1), a gene which helps to recruit it to the initiation complex in collaboration with tfiib. it promotes transcription elongation. Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GTF2F1.

[58682] The function of GTF2F1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM223.1.Hypermethylated in cancer 2 (HIC2, Accession XP_036937.2) is another GAM8145 target gene, herein designated TARGET GENE. HIC2 BINDING SITE is a target binding site found in the 3` untranslated region of multiple transcripts of mRNA encoded by HIC2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HIC2 BINDING SITE, designated SEQ ID:18759, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58683] Another function of GAM8145 is therefore inhibition of

Hypermethylated in cancer 2 (HIC2, Accession XP_036937.2) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HIC2.

[58684] Hypermethylated in cancer 2 (HIC2, Accession NP_055909.1) is another GAM8145 target gene, herein designated TARGET GENE. HIC2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by HIC2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HIC2 BINDING SITE, designated SEQ ID:18759, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58685] Another function of GAM8145 is therefore inhibition of Hypermethylated in cancer 2 (HIC2, Accession NP_055909.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HIC2.

[58686] Heparanase (HPSE, Accession NP_006656.1) is another GAM8145 target gene, herein designated TARGET GENE. HPSE BINDING SITE is a target binding site found in the 3'

untranslated region of mRNA encoded by HPSE, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HPSE BINDING SITE, designated SEQ ID:454, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58687] Another function of GAM8145 is therefore inhibition of Heparanase (HPSE, Accession NP_006656.1), a gene which is an endoglycosidase that cleaves heparan sulfate, and therefore may be associated with Breast cancer. Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of Breast cancer, and of other diseases and clinical conditions associated with HPSE.

[58688] The function of HPSE and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM66.2.HSPC009 (Accession NP_054738.1) is another GAM8145 target gene, herein designated TARGET GENE. HSPC009 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HSPC009, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4

illustrates the complementarity of the nucleotide sequences of HSPC009 BINDING SITE, designated SEQ ID:6013, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58689] Another function of GAM8145 is therefore inhibition of HSPC009 (Accession NP_054738.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HSPC009.

[58690] KIAA0265 (Accession XP_045954.2) is another GAM8145 target gene, herein designated TARGET GENE. KIAA0265 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0265, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0265 BINDING SITE, designated SEQ ID:16213, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58691] Another function of GAM8145 is therefore inhibition of KIAA0265 (Accession XP_045954.2) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

KIAA0265.

[58692] KIAA0354 (Accession NP_055687.1) is another GAM8145 target gene, herein designated TARGET GENE. KIAA0354 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0354, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0354 BINDING SITE, designated SEQ ID:18748, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58693] Another function of GAM8145 is therefore inhibition of KIAA0354 (Accession NP_055687.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0354.

[58694] KIAA0564 (Accession XP_038664.6) is another GAM8145 target gene, herein designated TARGET GENE. KIAA0564 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0564, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

KIAA0564 BINDING SITE, designated SEQ ID:16594, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58695] Another function of GAM8145 is therefore inhibition of KIAA0564 (Accession XP_038664.6) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0564.

[58696] KIAA0570 (Accession XP_291018.1) is another GAM8145 target gene, herein designated TARGET GENE. KIAA0570 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0570, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0570 BINDING SITE, designated SEQ ID:16814, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58697] Another function of GAM8145 is therefore inhibition of KIAA0570 (Accession XP_291018.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0570.

[58698] KIAA0795 (Accession NP_079286.1) is another GAM8145 target gene, herein designated TARGET GENE. KIAA0795 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0795, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0795 BINDING SITE, designated SEQ ID:8567, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58699] Another function of GAM8145 is therefore inhibition of KIAA0795 (Accession NP_079286.1). Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0795.

[58700] KIAA0872 (Accession NP_055755.1) is another GAM8145 target gene, herein designated TARGET GENE. KIAA0872 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0872, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0872 BINDING SITE, designated SEQ ID:3812, to the

nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58701] Another function of GAM8145 is therefore inhibition of KIAA0872 (Accession NP_055755.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0872.

[58702] KIAA1039 (Accession XP_085748.1) is another GAM8145 target gene, herein designated TARGET GENE. KIAA1039 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by KIAA1039, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1039 BINDING SITE, designated SEQ ID:14136, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58703] Another function of GAM8145 is therefore inhibition of KIAA1039 (Accession XP_085748.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1039.

[58704] KIAA1822 (Accession XP_041566.2) is another GAM8145

target gene, herein designated TARGET GENE. KIAA1822 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1822, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1822 BINDING SITE, designated SEQ ID:15750, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58705] Another function of GAM8145 is therefore inhibition of KIAA1822 (Accession XP_041566.2) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1822.

[58706] KIAA1841 (Accession XP_087056.4) is another GAM8145 target gene, herein designated TARGET GENE. KIAA1841 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1841, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1841 BINDING SITE, designated SEQ ID:5943, to the nucleotide sequence of GAM8145 RNA, herein designated

GAM RNA, also designated SEQ ID:328.

[58707] Another function of GAM8145 is therefore inhibition of KIAA1841 (Accession XP_087056.4) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1841.

[58708] KIAA1892 (Accession NP_056212.1) is another GAM8145 target gene, herein designated TARGET GENE. KIAA1892 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1892, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1892 BINDING SITE, designated SEQ ID:4184, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58709] Another function of GAM8145 is therefore inhibition of KIAA1892 (Accession NP_056212.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1892.

[58710] KIAA1981 (Accession XP_114000.1) is another GAM8145 target gene, herein designated TARGET GENE. KIAA1981

BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1981, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1981 BINDING SITE, designated SEQ ID:15733, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58711] Another function of GAM8145 is therefore inhibition of KIAA1981 (Accession XP_114000.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1981.

[58712] Kelch-like 8 (drosophila) (KLHL8, Accession NP_065854.1) is another GAM8145 target gene, herein designated TARGET GENE. KLHL8 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KLHL8, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KLHL8 BINDING SITE, designated SEQ ID:12192, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ

ID:328.

[58713] Another function of GAM8145 is therefore inhibition of Kelch-like 8 (drosophila) (KLHL8, Accession NP_065854.1). Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KLHL8.

[58714] Kininogen (KNG, Accession NP_000884.1) is another GAM8145 target gene, herein designated TARGET GENE. KNG BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by KNG, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KNG BINDING SITE, designated SEQ ID:1846, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58715] Another function of GAM8145 is therefore inhibition of Kininogen (KNG, Accession NP_000884.1), a gene which plays an important role in blood coagulation by helping to position optimally prekallikrein and factor xi next to factor xii; are inhibitors of thiol proteases and therefore may be associated with Williams trait. Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of

Williams trait, and of other diseases and clinical conditions associated with KNG.

[58716] The function of KNG and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM1394.1.KRTHBP2 (Accession XP_303553.1) is another GAM8145 target gene, herein designated TARGET GENE. KRTHBP2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KRTHBP2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KRTHBP2 BINDING SITE, designated SEQ ID:11295, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58717] Another function of GAM8145 is therefore inhibition of KRTHBP2 (Accession XP_303553.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KRTHBP2.

[58718] LOC134492 (Accession NP_660309.1) is another GAM8145 target gene, herein designated TARGET GENE.

LOC134492 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC134492, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC134492 BINDING SITE, designated SEQ ID:8992, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58719] Another function of GAM8145 is therefore inhibition of LOC134492 (Accession NP_660309.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC134492.

[58720] LOC149149 (Accession XP_097598.1) is another GAM8145 target gene, herein designated TARGET GENE. LOC149149 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC149149, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC149149 BINDING SITE, designated SEQ ID:12363, to the nucleotide sequence of

GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58721] Another function of GAM8145 is therefore inhibition of LOC149149 (Accession XP_097598.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC149149.

[58722] LOC149351 (Accession XP_086503.1) is another GAM8145 target gene, herein designated TARGET GENE. LOC149351 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC149351, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC149351 BINDING SITE, designated SEQ ID:12288, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58723] Another function of GAM8145 is therefore inhibition of LOC149351 (Accession XP_086503.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC149351.

[58724] LOC149670 (Accession XP_086647.4) is another GAM8145 target gene, herein designated TARGET GENE. LOC149670 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC149670, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC149670 BINDING SITE, designated SEQ ID:20142, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58725] Another function of GAM8145 is therefore inhibition of LOC149670 (Accession XP_086647.4) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC149670.

[58726] LOC150946 (Accession XP_097977.2) is another GAM8145 target gene, herein designated TARGET GENE. LOC150946 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC150946, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC150946 BINDING SITE, designated SEQ ID:11545, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58727] Another function of GAM8145 is therefore inhibition of LOC150946 (Accession XP_097977.2) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC150946.

[58728] LOC154062 (Accession XP_087842.1) is another GAM8145 target gene, herein designated TARGET GENE. LOC154062 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC154062, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC154062 BINDING SITE, designated SEQ ID:17934, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58729] Another function of GAM8145 is therefore inhibition of LOC154062 (Accession XP_087842.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC154062.

[58730] LOC158402 (Accession XP_098936.1) is another GAM8145 target gene, herein designated TARGET GENE. LOC158402 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC158402, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC158402 BINDING SITE, designated SEQ ID:12592, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58731] Another function of GAM8145 is therefore inhibition of LOC158402 (Accession XP_098936.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC158402.

[58732] LOC221405 (Accession XP_168138.1) is another GAM8145 target gene, herein designated TARGET GENE. LOC221405 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC221405, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC221405 BINDING SITE, designated SEQ ID:5393, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58733] Another function of GAM8145 is therefore inhibition of LOC221405 (Accession XP_168138.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC221405.

[58734] LOC221710 (Accession XP_166471.2) is another GAM8145 target gene, herein designated TARGET GENE. LOC221710 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC221710, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC221710 BINDING SITE, designated SEQ ID:17794, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58735] Another function of GAM8145 is therefore inhibition of

LOC221710 (Accession XP_166471.2) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC221710.

[58736] LOC222225 (Accession XP_168633.1) is another GAM8145 target gene, herein designated TARGET GENE. LOC222225 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC222225, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC222225 BINDING SITE, designated SEQ ID:10921, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58737] Another function of GAM8145 is therefore inhibition of LOC222225 (Accession XP_168633.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC222225.

[58738] LOC253228 (Accession XP_171113.3) is another GAM8145 target gene, herein designated TARGET GENE. LOC253228 BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by LOC253228, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC253228 BINDING SITE, designated SEQ ID:4153, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58739] Another function of GAM8145 is therefore inhibition of LOC253228 (Accession XP_171113.3) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC253228.

[58740] LOC254946 (Accession XP_171161.2) is another GAM8145 target gene, herein designated TARGET GENE. LOC254946 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC254946, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC254946 BINDING SITE, designated SEQ ID:18473, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also design-

nated SEQ ID:328.

[58741] Another function of GAM8145 is therefore inhibition of LOC254946 (Accession XP_171161.2) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC254946.

[58742] LOC283167 (Accession XP_210921.1) is another GAM8145 target gene, herein designated TARGET GENE. LOC283167 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283167, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283167 BINDING SITE, designated SEQ ID:9794, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58743] Another function of GAM8145 is therefore inhibition of LOC283167 (Accession XP_210921.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283167.

[58744] LOC283331 (Accession XP_210977.1) is another

GAM8145 target gene, herein designated TARGET GENE. LOC283331 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC283331, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283331 BINDING SITE, designated SEQ ID:9046, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58745] Another function of GAM8145 is therefore inhibition of LOC283331 (Accession XP_210977.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283331.

[58746] LOC283514 (Accession XP_210264.2) is another GAM8145 target gene, herein designated TARGET GENE. LOC283514 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283514, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283514 BINDING SITE, design-

nated SEQ ID:13165, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58747] Another function of GAM8145 is therefore inhibition of LOC283514 (Accession XP_210264.2) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283514.

[58748] LOC283893 (Accession XP_211247.1) is another GAM8145 target gene, herein designated TARGET GENE. LOC283893 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283893, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283893 BINDING SITE, designated SEQ ID:15479, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58749] Another function of GAM8145 is therefore inhibition of LOC283893 (Accession XP_211247.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC283893.

[58750] LOC283908 (Accession XP_211252.3) is another GAM8145 target gene, herein designated TARGET GENE. LOC283908 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283908, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283908 BINDING SITE, designated SEQ ID:15479, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58751] Another function of GAM8145 is therefore inhibition of LOC283908 (Accession XP_211252.3) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283908.

[58752] LOC284320 (Accession XP_209156.1) is another GAM8145 target gene, herein designated TARGET GENE. LOC284320 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC284320, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284320 BINDING SITE, designated SEQ ID:1483, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58753] Another function of GAM8145 is therefore inhibition of LOC284320 (Accession XP_209156.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284320.

[58754] LOC284445 (Accession XP_209212.1) is another GAM8145 target gene, herein designated TARGET GENE. LOC284445 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284445, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284445 BINDING SITE, designated SEQ ID:7639, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58755] Another function of GAM8145 is therefore inhibition of LOC284445 (Accession XP_209212.1) . Accordingly, utili-

ties of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284445.

[58756] LOC284475 (Accession XP_211478.1) is another GAM8145 target gene, herein designated TARGET GENE. LOC284475 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC284475, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284475 BINDING SITE, designated SEQ ID:10899, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58757] Another function of GAM8145 is therefore inhibition of LOC284475 (Accession XP_211478.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284475.

[58758] LOC284682 (Accession XP_211586.1) is another GAM8145 target gene, herein designated TARGET GENE. LOC284682 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by

LOC284682, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284682 BINDING SITE, designated SEQ ID:13805, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58759] Another function of GAM8145 is therefore inhibition of LOC284682 (Accession XP_211586.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284682.

[58760] LOC285099 (Accession XP_209474.1) is another GAM8145 target gene, herein designated TARGET GENE. LOC285099 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285099, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285099 BINDING SITE, designated SEQ ID:16224, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58761] Another function of GAM8145 is therefore inhibition of LOC285099 (Accession XP_209474.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285099.

[58762] LOC285103 (Accession XP_211766.1) is another GAM8145 target gene, herein designated TARGET GENE. LOC285103 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC285103, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285103 BINDING SITE, designated SEQ ID:8036, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58763] Another function of GAM8145 is therefore inhibition of LOC285103 (Accession XP_211766.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285103.

[58764] LOC285485 (Accession XP_211913.1) is another GAM8145 target gene, herein designated TARGET GENE.

LOC285485 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285485, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285485 BINDING SITE, designated SEQ ID:19642, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58765] Another function of GAM8145 is therefore inhibition of LOC285485 (Accession XP_211913.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285485.

[58766] LOC285662 (Accession XP_209713.1) is another GAM8145 target gene, herein designated TARGET GENE. LOC285662 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285662, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285662 BINDING SITE, designated SEQ ID:5278, to the nucleotide sequence of

GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58767] Another function of GAM8145 is therefore inhibition of LOC285662 (Accession XP_209713.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285662.

[58768] LOC285692 (Accession XP_211984.1) is another GAM8145 target gene, herein designated TARGET GENE. LOC285692 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285692, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285692 BINDING SITE, designated SEQ ID:12958, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58769] Another function of GAM8145 is therefore inhibition of LOC285692 (Accession XP_211984.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285692.

[58770] LOC285889 (Accession XP_212070.1) is another GAM8145 target gene, herein designated TARGET GENE. LOC285889 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285889, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285889 BINDING SITE, designated SEQ ID:6980, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58771] Another function of GAM8145 is therefore inhibition of LOC285889 (Accession XP_212070.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285889.

[58772] LOC285978 (Accession XP_212131.1) is another GAM8145 target gene, herein designated TARGET GENE. LOC285978 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285978, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC285978 BINDING SITE, designated SEQ ID:18029, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58773] Another function of GAM8145 is therefore inhibition of LOC285978 (Accession XP_212131.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285978.

[58774] LOC285981 (Accession XP_212114.1) is another GAM8145 target gene, herein designated TARGET GENE. LOC285981 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285981, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285981 BINDING SITE, designated SEQ ID:18029, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58775] Another function of GAM8145 is therefore inhibition of LOC285981 (Accession XP_212114.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC285981.

[58776] LOC286022 (Accession XP_212130.1) is another GAM8145 target gene, herein designated TARGET GENE. LOC286022 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286022, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286022 BINDING SITE, designated SEQ ID:3075, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58777] Another function of GAM8145 is therefore inhibition of LOC286022 (Accession XP_212130.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286022.

[58778] LOC286112 (Accession XP_212176.1) is another GAM8145 target gene, herein designated TARGET GENE. LOC286112 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC286112, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286112 BINDING SITE, designated SEQ ID:12097, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58779] Another function of GAM8145 is therefore inhibition of LOC286112 (Accession XP_212176.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286112.

[58780] LOC286399 (Accession NP_789789.1) is another GAM8145 target gene, herein designated TARGET GENE. LOC286399 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286399, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286399 BINDING SITE, designated SEQ ID:19146, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58781] Another function of GAM8145 is therefore inhibition of

LOC286399 (Accession NP_789789.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286399.

[58782] LOC286430 (Accession XP_210044.1) is another GAM8145 target gene, herein designated TARGET GENE. LOC286430 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC286430, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286430 BINDING SITE, designated SEQ ID:19962, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58783] Another function of GAM8145 is therefore inhibition of LOC286430 (Accession XP_210044.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286430.

[58784] LOC340133 (Accession XP_291151.1) is another GAM8145 target gene, herein designated TARGET GENE. LOC340133 BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by LOC340133, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340133 BINDING SITE, designated SEQ ID:17436, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58785] Another function of GAM8145 is therefore inhibition of LOC340133 (Accession XP_291151.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340133.

[58786] LOC340276 (Accession XP_295197.1) is another GAM8145 target gene, herein designated TARGET GENE. LOC340276 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC340276, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340276 BINDING SITE, designated SEQ ID:17407, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also design-

nated SEQ ID:328.

[58787] Another function of GAM8145 is therefore inhibition of LOC340276 (Accession XP_295197.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340276.

[58788] LOC340528 (Accession XP_295268.1) is another GAM8145 target gene, herein designated TARGET GENE. LOC340528 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC340528, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340528 BINDING SITE, designated SEQ ID:4381, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58789] Another function of GAM8145 is therefore inhibition of LOC340528 (Accession XP_295268.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340528.

[58790] LOC347941 (Accession XP_301398.1) is another

GAM8145 target gene, herein designated TARGET GENE. LOC347941 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC347941, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC347941 BINDING SITE, designated SEQ ID:16665, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58791] Another function of GAM8145 is therefore inhibition of LOC347941 (Accession XP_301398.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC347941.

[58792] LOC348378 (Accession XP_300723.1) is another GAM8145 target gene, herein designated TARGET GENE. LOC348378 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC348378, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348378 BINDING SITE, design-

nated SEQ ID:5706, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58793] Another function of GAM8145 is therefore inhibition of LOC348378 (Accession XP_300723.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348378.

[58794] LOC349339 (Accession XP_301042.1) is another GAM8145 target gene, herein designated TARGET GENE. LOC349339 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC349339, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349339 BINDING SITE, designated SEQ ID:7639, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58795] Another function of GAM8145 is therefore inhibition of LOC349339 (Accession XP_301042.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC349339.

[58796] LOC351743 (Accession XP_305099.1) is another GAM8145 target gene, herein designated TARGET GENE. LOC351743 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC351743, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC351743 BINDING SITE, designated SEQ ID:20137, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58797] Another function of GAM8145 is therefore inhibition of LOC351743 (Accession XP_305099.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC351743.

[58798] LOC352287 (Accession XP_305558.1) is another GAM8145 target gene, herein designated TARGET GENE. LOC352287 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC352287, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC352287 BINDING SITE, designated SEQ ID:1767, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58799] Another function of GAM8145 is therefore inhibition of LOC352287 (Accession XP_305558.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC352287.

[58800] LOC51279 (Accession NP_057630.1) is another GAM8145 target gene, herein designated TARGET GENE. LOC51279 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC51279, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC51279 BINDING SITE, designated SEQ ID:16462, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58801] Another function of GAM8145 is therefore inhibition of LOC51279 (Accession NP_057630.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC51279.

[58802] LOC89944 (Accession NP_612351.2) is another GAM8145 target gene, herein designated TARGET GENE. LOC89944 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC89944, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC89944 BINDING SITE, designated SEQ ID:19307, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58803] Another function of GAM8145 is therefore inhibition of LOC89944 (Accession NP_612351.2) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC89944.

[58804] LOC90826 (Accession NP_612373.1) is another GAM8145 target gene, herein designated TARGET GENE. LOC90826 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC90826, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of LOC90826 BINDING SITE, designated SEQ ID:3263, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58805] Another function of GAM8145 is therefore inhibition of LOC90826 (Accession NP_612373.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC90826.

[58806] LOC91464 (Accession XP_038589.1) is another GAM8145 target gene, herein designated TARGET GENE. LOC91464 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC91464, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC91464 BINDING SITE, designated SEQ ID:6655, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58807] Another function of GAM8145 is therefore inhibition of LOC91464 (Accession XP_038589.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC91464.

[58808] LOC95803 (Accession XP_047816.5) is another GAM8145 target gene, herein designated TARGET GENE. LOC95803 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC95803, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC95803 BINDING SITE, designated SEQ ID:9601, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58809] Another function of GAM8145 is therefore inhibition of LOC95803 (Accession XP_047816.5) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC95803.

[58810] Mannosidase, alpha, class 1a, member 1 (MAN1A1, Accession NP_005898.2) is another GAM8145 target gene, herein designated TARGET GENE. MAN1A1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MAN1A1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the comple-

mentarity of the nucleotide sequences of MAN1A1 BINDING SITE, designated SEQ ID:14751, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58811] Another function of GAM8145 is therefore inhibition of Mannosidase, alpha, class 1a, member 1 (MAN1A1, Accession NP_005898.2), a gene which removes 3 distinct mannose residues from peptide-bound Man(9)-GlcNAc(2) oligosaccharides. Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MAN1A1.

[58812] The function of MAN1A1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM129.1. Mannosidase, alpha, class 2a, member 1 (MAN2A1, Accession NP_002363.1) is another GAM8145 target gene, herein designated TARGET GENE. MAN2A1 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MAN2A1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MAN2A1 BINDING SITE, designated SEQ ID:9444, to the

nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58813] Another function of GAM8145 is therefore inhibition of Mannosidase, alpha, class 2a, member 1 (MAN2A1, Accession NP_002363.1), a gene which catalyzes the final hydrolytic step in the asparagine- linked oligosaccharide (N- glycan) maturation pathway and therefore may be associated with Lupus erythematosus. Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of Lupus erythematosus, and of other diseases and clinical conditions associated with MAN2A1.

[58814] The function of MAN2A1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM2565.2.MBNL2 (Accession NP_659002.1) is another GAM8145 target gene, herein designated TARGET GENE. MBNL2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by MBNL2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MBNL2 BINDING SITE, designated SEQ ID:1692, to the nucleotide sequence of GAM8145

RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58815] Another function of GAM8145 is therefore inhibition of MBNL2 (Accession NP_659002.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MBNL2.

[58816] Mesenchyme homeo box 2 (growth arrest-specific homeo box) (MEOX2, Accession NP_005915.1) is another GAM8145 target gene, herein designated TARGET GENE. MEOX2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MEOX2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MEOX2 BINDING SITE, designated SEQ ID:10706, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58817] Another function of GAM8145 is therefore inhibition of Mesenchyme homeo box 2 (growth arrest-specific homeo box) (MEOX2, Accession NP_005915.1), a gene which roles in mesoderm induction and, somitogenesis, and myogenic and sclerotomal differentiation. Accordingly, utilities of GAM8145 include diagnosis, prevention and

treatment of diseases and clinical conditions associated with MEOX2.

[58818] The function of MEOX2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM538.1.MGC11102 (Accession NP_115701.2) is another GAM8145 target gene, herein designated TARGET GENE. MGC11102 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC11102, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC11102 BINDING SITE, designated SEQ ID:11974, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58819] Another function of GAM8145 is therefore inhibition of MGC11102 (Accession NP_115701.2) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC11102.

[58820] MGC20781 (Accession NP_443167.1) is another GAM8145 target gene, herein designated TARGET GENE. MGC20781

BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MGC20781, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC20781 BINDING SITE, designated SEQ ID:1066, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58821] Another function of GAM8145 is therefore inhibition of MGC20781 (Accession NP_443167.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC20781.

[58822] MGC27434 (Accession NP_659487.1) is another GAM8145 target gene, herein designated TARGET GENE. MGC27434 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC27434, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC27434 BINDING SITE, designated SEQ ID:7480, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58823] Another function of GAM8145 is therefore inhibition of MGC27434 (Accession NP_659487.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC27434.

[58824] Nuclear receptor coactivator 6 (NCOA6, Accession NP_054790.1) is another GAM8145 target gene, herein designated TARGET GENE. NCOA6 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by NCOA6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NCOA6 BINDING SITE, designated SEQ ID:11974, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58825] Another function of GAM8145 is therefore inhibition of Nuclear receptor coactivator 6 (NCOA6, Accession NP_054790.1), a gene which activates gene transcription through ligand- dependent association with coactivators. and therefore may be associated with Breast cancer. Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of Breast cancer., and of other diseases

and clinical conditions associated with NCOA6.

[58826] The function of NCOA6 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM161.1. Oculocerebrorenal syndrome of Lowe (OCRL, Accession NP_001578.2) is another GAM8145 target gene, herein designated TARGET GENE. OCRL BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by OCRL, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of OCRL BINDING SITE, designated SEQ ID:11613, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58827] Another function of GAM8145 is therefore inhibition of Oculocerebrorenal syndrome of Lowe (OCRL, Accession NP_001578.2). Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with OCRL.

[58828] Oculocerebrorenal syndrome of Lowe (OCRL, Accession NP_000267.2) is another GAM8145 target gene, herein designated TARGET GENE. OCRL BINDING SITE is a target

binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by OCRL, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of OCRL BINDING SITE, designated SEQ ID:11613, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58829] Another function of GAM8145 is therefore inhibition of Oculocerebrorenal syndrome of Lowe (OCRL, Accession NP_000267.2). Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with OCRL.

[58830] Protocadherin alpha 11 (PCDHA11, Accession NP_061725.1) is another GAM8145 target gene, herein designated TARGET GENE. PCDHA11 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by PCDHA11, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PCDHA11 BINDING SITE, designated SEQ ID:10904, to the nucleotide sequence of GAM8145 RNA, herein design-

nated GAM RNA, also designated SEQ ID:328.

[58831] Another function of GAM8145 is therefore inhibition of Protocadherin alpha 11 (PCDHA11, Accession NP_061725.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PCDHA11.

[58832] Protocadherin alpha 11 (PCDHA11, Accession NP_114067.1) is another GAM8145 target gene, herein designated TARGET GENE. PCDHA11 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by PCDHA11, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PCDHA11 BINDING SITE, designated SEQ ID:10904, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58833] Another function of GAM8145 is therefore inhibition of Protocadherin alpha 11 (PCDHA11, Accession NP_114067.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PCDHA11.

[58834] PEF (Accession NP_036524.1) is another GAM8145 target

gene, herein designated TARGET GENE. PEF BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PEF, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PEF BINDING SITE, designated SEQ ID:5634, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58835] Another function of GAM8145 is therefore inhibition of PEF (Accession NP_036524.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PEF.

[58836] PKD1-like (Accession NP_079150.2) is another GAM8145 target gene, herein designated TARGET GENE. PKD1-like BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PKD1-like, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PKD1-like BINDING SITE, designated SEQ ID:2164, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58837] Another function of GAM8145 is therefore inhibition of PKD1-like (Accession NP_079150.2) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PKD1-like.

[58838] Phospholipid scramblase 3 (PLSCR3, Accession NP_065093.2) is another GAM8145 target gene, herein designated TARGET GENE. PLSCR3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PLSCR3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PLSCR3 BINDING SITE, designated SEQ ID:11017, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58839] Another function of GAM8145 is therefore inhibition of Phospholipid scramblase 3 (PLSCR3, Accession NP_065093.2) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PLSCR3.

[58840] Promyelocytic leukemia (PML, Accession NP_150241.1) is another GAM8145 target gene, herein designated TARGET

GENE. PML BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PML, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PML BINDING SITE, designated SEQ ID:18322, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58841] Another function of GAM8145 is therefore inhibition of Promyelocytic leukemia (PML, Accession NP_150241.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PML.

[58842] PNPLA1 (Accession NP_775947.1) is another GAM8145 target gene, herein designated TARGET GENE. PNPLA1 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by PNPLA1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PNPLA1 BINDING SITE, designated SEQ ID:17384, to the nucleotide sequence of GAM8145 RNA, herein designated

GAM RNA, also designated SEQ ID:328.

[58843] Another function of GAM8145 is therefore inhibition of PNPLA1 (Accession NP_775947.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PNPLA1.

[58844] Pou domain, class 3, transcription factor 2 (POU3F2, Accession NP_005595.1) is another GAM8145 target gene, herein designated TARGET GENE. POU3F2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by POU3F2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of POU3F2 BINDING SITE, designated SEQ ID:19075, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58845] Another function of GAM8145 is therefore inhibition of Pou domain, class 3, transcription factor 2 (POU3F2, Accession NP_005595.1), a gene which positively regulates the genes under the control of corticotropin- releasing hormone. Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with POU3F2.

[58846] The function of POU3F2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM94.1. Protein phosphatase, ef hand calcium-binding domain 2 (PPEF2, Accession NP_690911.1) is another GAM8145 target gene, herein designated TARGET GENE. PPEF2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PPEF2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PPEF2 BINDING SITE, designated SEQ ID:9035, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58847] Another function of GAM8145 is therefore inhibition of Protein phosphatase, ef hand calcium-binding domain 2 (PPEF2, Accession NP_690911.1), a gene which is a homolog of *Drosophila* rdgC. Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PPEF2.

[58848] The function of PPEF2 and its association with various diseases and clinical conditions, has been established by

previous studies, as described hereinabove with reference to GAM66.2. Protein kinase, camp-dependent, regulatory, type ii, beta (PRKAR2B, Accession NP_002727.1) is another GAM8145 target gene, herein designated TARGET GENE. PRKAR2B BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PRKAR2B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PRKAR2B BINDING SITE, designated SEQ ID:6242, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58849] Another function of GAM8145 is therefore inhibition of Protein kinase, camp-dependent, regulatory, type ii, beta (PRKAR2B, Accession NP_002727.1), a gene which type ii regulatory chains mediate membrane association by binding to anchoring proteins, including the map2 kinase. Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PRKAR2B.

[58850] The function of PRKAR2B and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM357.2. Protein tyrosine phosphatase, non-receptor type 9 (PTPN9, Accession NP_002824.1) is another GAM8145 target gene, herein designated TARGET GENE. PTPN9 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PTPN9, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PTPN9 BINDING SITE, designated SEQ ID:6603, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58851] Another function of GAM8145 is therefore inhibition of Protein tyrosine phosphatase, non-receptor type 9 (PTPN9, Accession NP_002824.1). Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PTPN9.

[58852] Protein tyrosine phosphatase, receptor type, t (PTPRT, Accession NP_573400.1) is another GAM8145 target gene, herein designated TARGET GENE. PTPRT BINDING SITE1 and PTPRT BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by PTPRT, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III

of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PTPRT BINDING SITE1 and PTPRT BINDING SITE2, designated SEQ ID:6604 and SEQ ID:6604 respectively, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58853] Another function of GAM8145 is therefore inhibition of Protein tyrosine phosphatase, receptor type, t (PTPRT, Accession NP_573400.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PTPRT.

[58854] Protein tyrosine phosphatase, receptor type, t (PTPRT, Accession NP_573400.1) is another GAM8145 target gene, herein designated TARGET GENE. PTPRT BINDING SITE1 and PTPRT BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by PTPRT, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PTPRT BINDING SITE1 and PTPRT BINDING SITE2, designated SEQ ID:19034 and SEQ ID:19034 respectively, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also design-

nated SEQ ID:328.

[58855] Another function of GAM8145 is therefore inhibition of Protein tyrosine phosphatase, receptor type, t (PTPRT, Accession NP_573400.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PTPRT.

[58856] Rho-related btb domain containing 3 (RHOBTB3, Accession NP_055714.1) is another GAM8145 target gene, herein designated TARGET GENE. RHOBTB3 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by RHOBTB3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RHOBTB3 BINDING SITE, designated SEQ ID:10064, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58857] Another function of GAM8145 is therefore inhibition of Rho-related btb domain containing 3 (RHOBTB3, Accession NP_055714.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RHOBTB3.

[58858] Ring finger protein 14 (RNF14, Accession NP_004281.1) is

another GAM8145 target gene, herein designated TARGET GENE. RNF14 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RNF14, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RNF14 BINDING SITE, designated SEQ ID:11351, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58859] Another function of GAM8145 is therefore inhibition of Ring finger protein 14 (RNF14, Accession NP_004281.1), a gene which associates with the androgen receptor (AR); functions as a transcriptional coactivator. Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RNF14.

[58860] The function of RNF14 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM205.2.Sodium channel, nonvoltage-gated 1, gamma (SCNN1G, Accession NP_001030.1) is another GAM8145 target gene, herein designated TARGET GENE. SCNN1G BINDING SITE is a target binding site found in the

3' untranslated region of mRNA encoded by SCNN1G, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SCNN1G BINDING SITE, designated SEQ ID:1599, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58861] Another function of GAM8145 is therefore inhibition of Sodium channel, nonvoltage-gated 1, gamma (SCNN1G, Accession NP_001030.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SCNN1G.

[58862] Sh3-domain grb2-like 2 (SH3GL2, Accession NP_003017.1) is another GAM8145 target gene, herein designated TARGET GENE. SH3GL2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SH3GL2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SH3GL2 BINDING SITE, designated SEQ ID:10145, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58863] Another function of GAM8145 is therefore inhibition of Sh3-domain grb2-like 2 (SH3GL2, Accession NP_003017.1), a gene which plays a role in synaptic vesicle recycling, in particular in clathrin-mediated vesicle endocytosis. Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SH3GL2.

[58864] The function of SH3GL2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM513.1.TACTILE (Accession NP_005807.1) is another GAM8145 target gene, herein designated TARGET GENE. TACTILE BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TACTILE, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TACTILE BINDING SITE, designated SEQ ID:16831, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58865] Another function of GAM8145 is therefore inhibition of TACTILE (Accession NP_005807.1). Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment

of diseases and clinical conditions associated with TAC-TILE.

[58866] Taf6 rna polymerase ii, tata box binding protein (tbp)-associated factor, 80kda (TAF6, Accession NP_620835.1) is another GAM8145 target gene, herein designated TARGET GENE. TAF6 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by TAF6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TAF6 BINDING SITE, designated SEQ ID:1733, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58867] Another function of GAM8145 is therefore inhibition of Taf6 rna polymerase ii, tata box binding protein (tbp)-associated factor, 80kda (TAF6, Accession NP_620835.1), a gene which plays a central role in mediating promoter responses to various activators and repressors. Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TAF6.

[58868] The function of TAF6 and its association with various dis-

eases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM507.1. Taf6 rna polymerase ii, tata box binding protein (tbp)-associated factor, 80kda (TAF6, Accession NP_005632.1) is another GAM8145 target gene, herein designated TARGET GENE. TAF6 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by TAF6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TAF6 BINDING SITE, designated SEQ ID:1733, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58869] Another function of GAM8145 is therefore inhibition of Taf6 rna polymerase ii, tata box binding protein (tbp)-associated factor, 80kda (TAF6, Accession NP_005632.1), a gene which plays a central role in mediating promoter responses to various activators and repressors. Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TAF6.

[58870] The function of TAF6 and its association with various dis-

eases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM507.1. Transducin (beta)-like 1x-linked (TBL1X, Accession NP_005638.1) is another GAM8145 target gene, herein designated TARGET GENE. TBL1X BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TBL1X, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TBL1X BINDING SITE, designated SEQ ID:2978, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58871] Another function of GAM8145 is therefore inhibition of Transducin (beta)-like 1x-linked (TBL1X, Accession NP_005638.1), a gene which activates latent HDAC3 activity. Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TBL1X.

[58872] The function of TBL1X and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM28.1. T-cell leukemia/lymphoma 1b (TCL1B, Ac-

cession NP_004909.1) is another GAM8145 target gene, herein designated TARGET GENE. TCL1B BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TCL1B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TCL1B BINDING SITE, designated SEQ ID:4847, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58873] Another function of GAM8145 is therefore inhibition of T-cell leukemia/lymphoma 1b (TCL1B, Accession NP_004909.1), a gene which is a member of the TCL1 family that is activated in chronic t- cell leukemias (t- cll) and therefore may be associated with Chronic t- cell leukemias. Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of Chronic t- cell leukemias, and of other diseases and clinical conditions associated with TCL1B.

[58874] The function of TCL1B and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM47.1. Transketolase-like 1 (TKTL1, Accession

NP_036385.1) is another GAM8145 target gene, herein designated TARGET GENE. TKTL1 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by TKTL1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TKTL1 BINDING SITE, designated SEQ ID:10570, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58875] Another function of GAM8145 is therefore inhibition of Transketolase-like 1 (TKTL1, Accession NP_036385.1), a gene which involves in pentose phosphate pathway and therefore may be associated with Wernicke- korsakoff syndrome. Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of Wernicke- korsakoff syndrome, and of other diseases and clinical conditions associated with TKTL1.

[58876] The function of TKTL1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM608.2. Testis-specific transcript, y-linked 9 (TTY9, Accession NP_114133.1) is another GAM8145

target gene, herein designated TARGET GENE. TTTY9 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TTTY9, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TTTY9 BINDING SITE, designated SEQ ID:17970, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58877] Another function of GAM8145 is therefore inhibition of Testis-specific transcript, y-linked 9 (TTY9, Accession NP_114133.1). Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TTTY9.

[58878] Udp-glucuronate decarboxylase 1 (UXS1, Accession NP_079352.1) is another GAM8145 target gene, herein designated TARGET GENE. UXS1 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by UXS1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of UXS1 BINDING SITE, designated SEQ ID:9295, to the nucleotide sequence of GAM8145

RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58879] Another function of GAM8145 is therefore inhibition of Udp-glucuronate decarboxylase 1 (UXS1, Accession NP_079352.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with UXS1.

[58880] Vacuolar protein sorting 4a (yeast) (VPS4A, Accession NP_037377.1) is another GAM8145 target gene, herein designated TARGET GENE. VPS4A BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by VPS4A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of VPS4A BINDING SITE, designated SEQ ID:12450, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58881] Another function of GAM8145 is therefore inhibition of Vacuolar protein sorting 4a (yeast) (VPS4A, Accession NP_037377.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with VPS4A.

[58882] Reserved (WDR17, Accession NP_851782.1) is another GAM8145 target gene, herein designated TARGET GENE. WDR17 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by WDR17, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of WDR17 BINDING SITE, designated SEQ ID:15836, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58883] Another function of GAM8145 is therefore inhibition of Reserved (WDR17, Accession NP_851782.1) . Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with WDR17.

[58884] Zinc finger protein 187 (ZNF187, Accession NP_689949.1) is another GAM8145 target gene, herein designated TARGET GENE. ZNF187 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZNF187, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of ZNF187 BINDING SITE, designated SEQ ID:1570, to the nucleotide sequence of GAM8145 RNA, herein designated GAM RNA, also designated SEQ ID:328.

[58885] Another function of GAM8145 is therefore inhibition of Zinc finger protein 187 (ZNF187, Accession NP_689949.1). Accordingly, utilities of GAM8145 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF187.

[58886]

[58887] Fig. 8 further provides a conceptual description of a novel bioinformatically detected of the present invention, referred to here as Genomic Address Messenger 8297 (GAM8297), which modulates expression of respective target genes thereof, the function and utility of which target genes is known in the art.

[58888] GAM8297 is a novel bioinformatically detected regulatory, non protein coding, micro RNA (miRNA) gene. The method by which GAM8297 was detected is described hereinabove with reference to Figs. 8–15.

[58889] GAM8297 gene, herein designated GAM GENE, and GAM8297 target gene, herein designated TARGET GENE, are human genes contained in the human genome.

[58890] GAM8297 gene encodes a GAM8297 precursor RNA, herein designated GAM PRECURSOR RNA. Similar to other miRNA genes, and unlike most ordinary genes, GAM8297 precursor RNA does not encode a protein. A nucleotide sequence identical or highly similar to the nucleotide sequence of GAM8297 precursor RNA is designated SEQ ID:154, and is provided hereinbelow with reference to the sequence listing part.

[58891] GAM8297 precursor RNA folds onto itself, forming GAM8297 folded precursor RNA, herein designated GAM FOLDED PRECURSOR RNA, which has a two-dimensional `hairpin structure`. As is well known in the art, this `hairpin structure`, is typical of RNA encoded by miRNA genes, and is due to the fact that the nucleotide sequence of the first half of the RNA encoded by a miRNA gene is an accurate or partial inversed-reversed sequence of the nucleotide sequence of the second half thereof.

[58892] GAM8297 precursor RNA folds onto itself, forming GAM8297 folded precursor RNA, herein designated GAM FOLDED PRECURSOR RNA, which has a two-dimensional `hairpin structure`. As is well known in the art, this `hairpin structure`, is typical of RNA encoded by miRNA genes, and is due to the fact that the nucleotide sequence

of the first half of the RNA encoded by a miRNA gene is an accurate or partial reverse-complementary sequence of the nucleotide sequence of the second half thereof.

[58893] Nucleotide sequence of GAM8297 precursor RNA, designated SEQ-ID: 154, and a schematic representation of a predicted secondary folding of GAM8297 folded precursor RNA are further described with reference to Table 2, hereby incorporated by reference.

[58894] An enzyme complex designated DICER COMPLEX, `dices` the GAM8297 folded precursor RNA into GAM8297 RNA, herein designated GAM RNA, a single stranded ~22 nt long RNA segment. As is known in the art, `dicing` of a hairpin structured RNA precursor product into a short ~22nt RNA segment is catalyzed by an enzyme complex comprising an enzyme called Dicer together with other necessary proteins. A probable (GAM Prediction Accuracy Group: B) nucleotide sequence of GAM8297 RNA is designated SEQ ID:367, and is provided hereinbelow with references to the sequence listing part and Table 3, hereby incorporated by reference.

[58895] GAM8297 target gene, herein designated TARGET GENE, encodes a corresponding messenger RNA, GAM8297 target RNA, herein designated GAM TARGET RNA. GAM8297

target RNA comprises three regions, as is typical of mRNA of a protein coding gene: a 5' untranslated region, a protein coding region and a 3' untranslated region, designated 5'UTR, PROTEIN CODING and 3'UTR respectively.

[58896] GAM8297 RNA, herein designated GAM RNA, binds complementarily to one or more target binding sites located in untranslated regions of GAM8297 target RNA, herein designated GAM TARGET RNA. This complementary binding is due to the fact that the nucleotide sequence of GAM8297 RNA is an accurate or a partial inversed-reversed sequence of the nucleotide sequence of each of the target binding sites. As an illustration, Fig. 8 shows three such target binding sites, designated BINDING SITE I, BINDING SITE II and BINDING SITE III respectively. It is appreciated that the number of target binding sites shown in Fig. 8 is meant as an illustration only, and is not meant to be limiting. GAM8297 RNA may have a different number of target binding sites in untranslated regions of a GAM8297 target RNA. It is further appreciated that while Fig. 8 depicts target binding sites in the 3'UTR region, this is meant as an example only. These target binding sites may be located in the 3'UTR region, the 5'UTR region, or in both 3'UTR and 5'UTR regions.

[58897] The complementary binding of GAM8297 RNA, herein designated GAM RNA, to target binding sites on GAM8297 target RNA, herein designated GAM TARGET RNA, such as BINDING SITE I, BINDING SITE II and BINDING SITE III, inhibits translation of GAM8297 target RNA into GAM8297 target protein, herein designated GAM TARGET PROTEIN. GAM target protein is therefore outlined by a broken line.

[58898] It is appreciated that GAM8297 target gene, herein designated TARGET GENE, in fact represents a plurality of GAM8297 target genes. The mRNA of each one of this plurality of GAM8297 target genes comprises one or more target binding sites, each having a nucleotide sequence which is at least partly complementary to GAM8297 RNA, herein designated GAM RNA, and which when bound by GAM8297 RNA causes inhibition of translation of respective one or more GAM8297 target proteins.

[58899] It is further appreciated by one skilled in the art that the mode of translational inhibition illustrated by Fig. 8 with specific reference to translational inhibition exerted by GAM8297 gene, herein designated GAM GENE, on one or more GAM8297 target genes, herein collectively designated TARGET GENE, is common to other known miRNA genes. As mentioned hereinabove with reference to the

background section, although a specific complementary binding site has been demonstrated only for some of the known miRNA genes (primarily Lin-4 and Let-7), all other recently discovered miRNA genes are also believed by those skilled in the art to modulate expression of other genes by complementary binding, although specific complementary binding sites of these other miRNA genes have not yet been found (Ruvkun G., Perspective: Glimpses of a tiny RNA world, Science 294,779 (2001)).

[58900] It is appreciated that specific functions and accordingly utilities of GAM8297 correlate with, and may be deduced from, the identity of the target genes which GAM8297 binds and inhibits, and the function of these target genes, as elaborated hereinbelow.

[58901]

[58902]

[58903] Atp-binding cassette, sub-family f (gcn20), member 2 (ABCF2, Accession NP_005683.2) is a GAM8297 target gene, herein designated TARGET GENE. ABCF2 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by ABCF2, corresponding to a target binding site such as BINDING

SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ABCF2 BINDING SITE, designated SEQ ID:2015, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[58904] A function of GAM8297 is therefore inhibition of Atp-binding cassette, sub-family f (gcn20), member 2 (ABCF2, Accession NP_005683.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ABCF2.

[58905] Atp-binding cassette, sub-family f (gcn20), member 2 (ABCF2, Accession NP_009120.1) is another GAM8297 target gene, herein designated TARGET GENE. ABCF2 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by ABCF2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ABCF2 BINDING SITE, designated SEQ ID:2015, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[58906] Another function of GAM8297 is therefore inhibition of

Atp-binding cassette, sub-family f (gcn20), member 2 (ABCF2, Accession NP_009120.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ABCF2.

[58907] A disintegrin and metalloproteinase domain 2 (fertilin beta) (ADAM2, Accession NP_001455.2) is another GAM8297 target gene, herein designated TARGET GENE. ADAM2 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by ADAM2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ADAM2 BINDING SITE, designated SEQ ID:6042, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[58908] Another function of GAM8297 is therefore inhibition of A disintegrin and metalloproteinase domain 2 (fertilin beta) (ADAM2, Accession NP_001455.2), a gene which sperm surface membrane protein that may be involved in sperm-egg plasma membrane adhesion and fusion during fertilization. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ADAM2.

[58909] The function of ADAM2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM3026.1. Adenylate cyclase 1 (brain) (ADCY1, Accession NP_066939.1) is another GAM8297 target gene, herein designated TARGET GENE. ADCY1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by ADCY1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ADCY1 BINDING SITE, designated SEQ ID:13856, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[58910] Another function of GAM8297 is therefore inhibition of Adenylate cyclase 1 (brain) (ADCY1, Accession NP_066939.1), a gene which is a calmodulin-sensitive adenylyl cyclase. It may play a role in memory acquisition and learning. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ADCY1.

[58911] The function of ADCY1 and its association with various diseases and clinical conditions, has been established by

previous studies, as described hereinabove with reference to GAM144.1. Adenosine a3 receptor (ADORA3, Accession NP_000668.1) is another GAM8297 target gene, herein designated TARGET GENE. ADORA3 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by ADORA3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ADORA3 BINDING SITE, designated SEQ ID:2855, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[58912] Another function of GAM8297 is therefore inhibition of Adenosine a3 receptor (ADORA3, Accession NP_000668.1), a gene which the activity of this receptor is mediated by G proteins which inhibits adenylyl cyclase. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ADORA3.

[58913] The function of ADORA3 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM291.1. ALK7 (Accession NP_660302.1) is another

GAM8297 target gene, herein designated TARGET GENE. ALK7 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ALK7, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ALK7 BINDING SITE, designated SEQ ID:7726, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[58914] Another function of GAM8297 is therefore inhibition of ALK7 (Accession NP_660302.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ALK7.

[58915] Ras homolog gene family, member f (in filopodia) (ARHF, Accession NP_061907.1) is another GAM8297 target gene, herein designated TARGET GENE. ARHF BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ARHF, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ARHF BINDING SITE, designated SEQ ID:11640, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also design-

nated SEQ ID:367.

[58916] Another function of GAM8297 is therefore inhibition of Ras homolog gene family, member f (in filopodia) (ARHF, Accession NP_061907.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ARHF.

[58917] Rho guanine nucleotide exchange factor (gef) 10 (ARHGEF10, Accession NP_055444.1) is another GAM8297 target gene, herein designated TARGET GENE. ARHGEF10 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by ARHGEF10, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ARHGEF10 BINDING SITE, designated SEQ ID:19384, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[58918] Another function of GAM8297 is therefore inhibition of Rho guanine nucleotide exchange factor (gef) 10 (ARHGEF10, Accession NP_055444.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ARHGEF10.

[58919] Ankyrin repeat and socs box-containing 17 (ASB17, Accession NP_543144.1) is another GAM8297 target gene, herein designated TARGET GENE. ASB17 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ASB17, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ASB17 BINDING SITE, designated SEQ ID:491, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[58920] Another function of GAM8297 is therefore inhibition of Ankyrin repeat and socs box-containing 17 (ASB17, Accession NP_543144.1). Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ASB17.

[58921] Beta-1,3-glucuronyltransferase 1 (glucuronosyltransferase p) (B3GAT1, Accession NP_473366.1) is another GAM8297 target gene, herein designated TARGET GENE. B3GAT1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by B3GAT1, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of B3GAT1 BINDING SITE, designated SEQ ID:1556, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[58922] Another function of GAM8297 is therefore inhibition of Beta-1,3-glucuronyltransferase 1 (glucuronosyltransferase p) (B3GAT1, Accession NP_473366.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with B3GAT1.

[58923] Beta-1,3-glucuronyltransferase 1 (glucuronosyltransferase p) (B3GAT1, Accession NP_061114.1) is another GAM8297 target gene, herein designated TARGET GENE. B3GAT1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by B3GAT1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of B3GAT1 BINDING SITE, designated SEQ ID:1556, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[58924] Another function of GAM8297 is therefore inhibition of Beta-1,3-glucuronyltransferase 1 (glucuronosyltransferase p) (B3GAT1, Accession NP_061114.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with B3GAT1.

[58925] Biglycan (BGN, Accession NP_001702.1) is another GAM8297 target gene, herein designated TARGET GENE. BGN BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by BGN, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BGN BINDING SITE, designated SEQ ID:14465, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[58926] Another function of GAM8297 is therefore inhibition of Biglycan (BGN, Accession NP_001702.1), a gene which is involved in collagen fiber assembly. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BGN.

[58927] The function of BGN and its association with various diseases and clinical conditions, has been established by

previous studies, as described hereinabove with reference to GAM282.2. Burkitt lymphoma receptor 1, gtp binding protein (chemokine (c-x-c motif) receptor 5) (BLR1, Accession NP_001707.1) is another GAM8297 target gene, herein designated TARGET GENE. BLR1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by BLR1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BLR1 BINDING SITE, designated SEQ ID:18216, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[58928] Another function of GAM8297 is therefore inhibition of Burkitt lymphoma receptor 1, gtp binding protein (chemokine (c-x-c motif) receptor 5) (BLR1, Accession NP_001707.1). Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BLR1.

[58929] Burkitt lymphoma receptor 1, gtp binding protein (chemokine (c-x-c motif) receptor 5) (BLR1, Accession NP_116743.1) is another GAM8297 target gene, herein designated TARGET GENE. BLR1 BINDING SITE is a target

binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by BLR1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BLR1 BINDING SITE, designated SEQ ID:18216, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[58930] Another function of GAM8297 is therefore inhibition of Burkitt lymphoma receptor 1, gtp binding protein (chemokine (c-x-c motif) receptor 5) (BLR1, Accession NP_116743.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BLR1.

[58931] Chromosome 1 open reading frame 2 (C1orf2, Accession NP_006580.1) is another GAM8297 target gene, herein designated TARGET GENE. C1orf2 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by C1orf2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C1orf2 BINDING SITE, designated SEQ ID:11170, to the nucleotide sequence of GAM8297

RNA, herein designated GAM RNA, also designated SEQ ID:367.

[58932] Another function of GAM8297 is therefore inhibition of Chromosome 1 open reading frame 2 (C1orf2, Accession NP_006580.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C1orf2.

[58933] Chromosome 21 open reading frame 108 (C21orf108, Accession XP_114191.2) is another GAM8297 target gene, herein designated TARGET GENE. C21orf108 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C21orf108, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C21orf108 BINDING SITE, designated SEQ ID:3476, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[58934] Another function of GAM8297 is therefore inhibition of Chromosome 21 open reading frame 108 (C21orf108, Accession XP_114191.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C21orf108.

[58935] Chromosome 6 open reading frame 33 (C6orf33, Accession NP_588608.1) is another GAM8297 target gene, herein designated TARGET GENE. C6orf33 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C6orf33, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C6orf33 BINDING SITE, designated SEQ ID:10725, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[58936] Another function of GAM8297 is therefore inhibition of Chromosome 6 open reading frame 33 (C6orf33, Accession NP_588608.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C6orf33.

[58937] C6orf50 (Accession XP_166460.1) is another GAM8297 target gene, herein designated TARGET GENE. C6orf50 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C6orf50, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

C6orf50 BINDING SITE, designated SEQ ID:16763, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[58938] Another function of GAM8297 is therefore inhibition of C6orf50 (Accession XP_166460.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C6orf50.

[58939] Chromosome 9 open reading frame 14 (C9orf14, Accession XP_098859.2) is another GAM8297 target gene, herein designated TARGET GENE. C9orf14 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by C9orf14, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C9orf14 BINDING SITE, designated SEQ ID:17546, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[58940] Another function of GAM8297 is therefore inhibition of Chromosome 9 open reading frame 14 (C9orf14, Accession XP_098859.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and

clinical conditions associated with C9orf14.

[58941] Calcium channel, voltage-dependent, I type, alpha 1d subunit (CACNA1D, Accession NP_000711.1) is another GAM8297 target gene, herein designated TARGET GENE. CACNA1D BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by CACNA1D, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CACNA1D BINDING SITE, designated SEQ ID:7620, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[58942] Another function of GAM8297 is therefore inhibition of Calcium channel, voltage-dependent, I type, alpha 1d subunit (CACNA1D, Accession NP_000711.1), a gene which mediates the entry of calcium ions into excitable cells and therefore may be associated with Self-biting and other self-injurious behaviors. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of Self-biting and other self-injurious behaviors, and of other diseases and clinical conditions associated with CACNA1D.

[58943] The function of CACNA1D and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM1095.1. Calcium channel, voltage-dependent, alpha 1h subunit (CACNA1H, Accession NP_066921.1) is another GAM8297 target gene, herein designated TARGET GENE. CACNA1H BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CACNA1H, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CACNA1H BINDING SITE, designated SEQ ID:14959, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[58944] Another function of GAM8297 is therefore inhibition of Calcium channel, voltage-dependent, alpha 1h subunit (CACNA1H, Accession NP_066921.1). Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CACNA1H.

[58945] Calcium channel, voltage-dependent, beta 1 subunit (CACNB1, Accession NP_000714.2) is another GAM8297

target gene, herein designated TARGET GENE. CACNB1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CACNB1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CACNB1 BINDING SITE, designated SEQ ID:17887, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[58946] Another function of GAM8297 is therefore inhibition of Calcium channel, voltage-dependent, beta 1 subunit (CACNB1, Accession NP_000714.2), a gene which may not only play an important role in the transport/insertion of the alpha-1S subunit into the membrane. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CACNB1.

[58947] The function of CACNB1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM347.2. Chemokine (c-c motif) ligand 14 (CCL14, Accession NP_116738.1) is another GAM8297 target gene, herein designated TARGET GENE. CCL14 BINDING SITE is a

target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by CCL14, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CCL14 BINDING SITE, designated SEQ ID:12494, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[58948] Another function of GAM8297 is therefore inhibition of Chemokine (c-c motif) ligand 14 (CCL14, Accession NP_116738.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CCL14.

[58949] Chemokine (c-c motif) ligand 14 (CCL14, Accession NP_004157.1) is another GAM8297 target gene, herein designated TARGET GENE. CCL14 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by CCL14, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CCL14 BINDING SITE, designated SEQ ID:12494, to the nucleotide sequence of GAM8297 RNA, herein designated

GAM RNA, also designated SEQ ID:367.

[58950] Another function of GAM8297 is therefore inhibition of Chemokine (c-c motif) ligand 14 (CCL14, Accession NP_004157.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CCL14.

[58951] Chemokine (c-c motif) ligand 14 (CCL14, Accession NP_116739.1) is another GAM8297 target gene, herein designated TARGET GENE. CCL14 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by CCL14, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CCL14 BINDING SITE, designated SEQ ID:12494, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[58952] Another function of GAM8297 is therefore inhibition of Chemokine (c-c motif) ligand 14 (CCL14, Accession NP_116739.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CCL14.

[58953] Chemokine (c-c motif) ligand 15 (CCL15, Accession

NP_116740.1) is another GAM8297 target gene, herein designated TARGET GENE. CCL15 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CCL15, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CCL15 BINDING SITE, designated SEQ ID:12494, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[58954] Another function of GAM8297 is therefore inhibition of Chemokine (c-c motif) ligand 15 (CCL15, Accession NP_116740.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CCL15.

[58955] Chemokine (c-c motif) ligand 15 (CCL15, Accession NP_004158.1) is another GAM8297 target gene, herein designated TARGET GENE. CCL15 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CCL15, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

CCL15 BINDING SITE, designated SEQ ID:12494, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[58956] Another function of GAM8297 is therefore inhibition of Chemokine (c-c motif) ligand 15 (CCL15, Accession NP_004158.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CCL15.

[58957] Cdk5 regulatory subunit associated protein 3 (CDK5RAP3, Accession NP_079473.2) is another GAM8297 target gene, herein designated TARGET GENE. CDK5RAP3 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CDK5RAP3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CDK5RAP3 BINDING SITE, designated SEQ ID:3296, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[58958] Another function of GAM8297 is therefore inhibition of Cdk5 regulatory subunit associated protein 3 (CDK5RAP3, Accession NP_079473.2) . Accordingly, utilities of

GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CDK5RAP3.

[58959] Cdk5 regulatory subunit associated protein 3 (CDK5RAP3, Accession NP_788275.1) is another GAM8297 target gene, herein designated TARGET GENE. CDK5RAP3 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CDK5RAP3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CDK5RAP3 BINDING SITE, designated SEQ ID:3296, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[58960] Another function of GAM8297 is therefore inhibition of Cdk5 regulatory subunit associated protein 3 (CDK5RAP3, Accession NP_788275.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CDK5RAP3.

[58961] Glycoprotein hormones, alpha polypeptide (CGA, Accession NP_000726.1) is another GAM8297 target gene,

herein designated TARGET GENE. CGA BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CGA, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CGA BINDING SITE, designated SEQ ID:6094, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[58962] Another function of GAM8297 is therefore inhibition of Glycoprotein hormones, alpha polypeptide (CGA, Accession NP_000726.1), a gene which is a precursor of the alpha subunit of chorionic gonadotropin hormone. and therefore may be associated with Secondary infertility . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of Secondary infertility ., and of other diseases and clinical conditions associated with CGA.

[58963] The function of CGA and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM47.1.CGI-69 (Accession NP_057100.1) is another GAM8297 target gene, herein designated TARGET GENE.

CGI-69 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CGI-69, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CGI-69 BINDING SITE, designated SEQ ID:15577, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[58964] Another function of GAM8297 is therefore inhibition of CGI-69 (Accession NP_057100.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CGI-69.

[58965] Cyclin m2 (CNNM2, Accession NP_060119.2) is another GAM8297 target gene, herein designated TARGET GENE. CNNM2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CNNM2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CNNM2 BINDING SITE, designated SEQ ID:9355, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[58966] Another function of GAM8297 is therefore inhibition of

Cyclin m2 (CNNM2, Accession NP_060119.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CNNM2.

[58967] Cannabinoid receptor 1 (brain) (CNR1, Accession NP_057167.1) is another GAM8297 target gene, herein designated TARGET GENE. CNR1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CNR1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CNR1 BINDING SITE, designated SEQ ID:8385, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[58968] Another function of GAM8297 is therefore inhibition of Cannabinoid receptor 1 (brain) (CNR1, Accession NP_057167.1), a gene which is involved in the cannabinoid-induced CNS effects. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CNR1.

[58969] The function of CNR1 and its association with various diseases and clinical conditions, has been established by

previous studies, as described hereinabove with reference to GAM282.2.Collagen, type i, alpha 1 (COL1A1, Accession NP_000079.1) is another GAM8297 target gene, herein designated TARGET GENE. COL1A1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by COL1A1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of COL1A1 BINDING SITE, designated SEQ ID:10598, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[58970] Another function of GAM8297 is therefore inhibition of Collagen, type i, alpha 1 (COL1A1, Accession NP_000079.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with COL1A1.

[58971] CPR2 (Accession NP_112162.1) is another GAM8297 target gene, herein designated TARGET GENE. CPR2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CPR2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4

illustrates the complementarity of the nucleotide sequences of CPR2 BINDING SITE, designated SEQ ID:19074, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[58972] Another function of GAM8297 is therefore inhibition of CPR2 (Accession NP_112162.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CPR2.

[58973] Corticotropin releasing hormone receptor 1 (CRHR1, Accession NP_004373.2) is another GAM8297 target gene, herein designated TARGET GENE. CRHR1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CRHR1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CRHR1 BINDING SITE, designated SEQ ID:6267, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[58974] Another function of GAM8297 is therefore inhibition of Corticotropin releasing hormone receptor 1 (CRHR1, Accession NP_004373.2), a gene which likely mediates physiological and behavioral response to stress. and therefore

may be associated with Adenomas. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of Adenomas, and of other diseases and clinical conditions associated with CRHR1.

[58975] The function of CRHR1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM852.1. Cartilage linking protein 1 (CRTL1, Accession NP_001875.1) is another GAM8297 target gene, herein designated TARGET GENE. CRTL1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CRTL1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CRTL1 BINDING SITE, designated SEQ ID:1537, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[58976] Another function of GAM8297 is therefore inhibition of Cartilage linking protein 1 (CRTL1, Accession NP_001875.1), a gene which stabilize the aggregates of proteoglycan monomers with hyaluronic acid. and therefore may be associated with Several heritable chondrodys-

plasias. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of Several heritable chondrodysplasias, and of other diseases and clinical conditions associated with CRTL1.

[58977] The function of CRTL1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM1144.1. Casein kinase 1, gamma 2 (CSNK1G2, Accession NP_001310.2) is another GAM8297 target gene, herein designated TARGET GENE. CSNK1G2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CSNK1G2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CSNK1G2 BINDING SITE, designated SEQ ID:10903, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[58978] Another function of GAM8297 is therefore inhibition of Casein kinase 1, gamma 2 (CSNK1G2, Accession NP_001310.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CSNK1G2.

[58979] Cytochrome c-1 (CYC1, Accession NP_001907.2) is another GAM8297 target gene, herein designated TARGET GENE. CYC1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CYC1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CYC1 BINDING SITE, designated SEQ ID:2163, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[58980] Another function of GAM8297 is therefore inhibition of Cytochrome c-1 (CYC1, Accession NP_001907.2). Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CYC1.

[58981] Cytoplasmic fmr1 interacting protein 2 (CYFIP2, Accession NP_055191.1) is another GAM8297 target gene, herein designated TARGET GENE. CYFIP2 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by CYFIP2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CYFIP2 BINDING SITE, designated

SEQ ID:7131, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[58982] Another function of GAM8297 is therefore inhibition of Cytoplasmic fmr1 interacting protein 2 (CYFIP2, Accession NP_055191.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CYFIP2.

[58983] Dishevelled associated activator of morphogenesis 1 (DAAM1, Accession NP_055807.1) is another GAM8297 target gene, herein designated TARGET GENE. DAAM1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DAAM1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DAAM1 BINDING SITE, designated SEQ ID:13477, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[58984] Another function of GAM8297 is therefore inhibition of Dishevelled associated activator of morphogenesis 1 (DAAM1, Accession NP_055807.1), a gene which controls cell polarity and movement during development. Accord-

ingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DAAM1.

[58985] The function of DAAM1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM801.1. Defensin, beta 1 (DEFB1, Accession NP_005209.1) is another GAM8297 target gene, herein designated TARGET GENE. DEFB1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DEFB1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DEFB1 BINDING SITE, designated SEQ ID:7595, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[58986] Another function of GAM8297 is therefore inhibition of Defensin, beta 1 (DEFB1, Accession NP_005209.1), a gene which has salt- dependent antimicrobial activity and may act in innate immunity. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DEFB1.

[58987] The function of DEFB1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM537.2.DEPC-1 (Accession NP_631917.1) is another GAM8297 target gene, herein designated TARGET GENE. DEPC-1 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by DEPC-1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DEPC-1 BINDING SITE, designated SEQ ID:9065, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[58988] Another function of GAM8297 is therefore inhibition of DEPC-1 (Accession NP_631917.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DEPC-1.

[58989] Deiodinase, iodothyronine, type iii (DIO3, Accession NP_001353.2) is another GAM8297 target gene, herein designated TARGET GENE. DIO3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DIO3, corresponding to a target binding site

such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DIO3 BINDING SITE, designated SEQ ID:3054, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

- [58990] Another function of GAM8297 is therefore inhibition of Deiodinase, iodothyronine, type iii (DIO3, Accession NP_001353.2), a gene which regulates circulating fetal thyroid hormone concentrations . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DIO3.
- [58991] The function of DIO3 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM291.1.DKFZP434A0131 (Accession NP_061864.1) is another GAM8297 target gene, herein designated TARGET GENE. DKFZP434A0131 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZP434A0131, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP434A0131

BINDING SITE, designated SEQ ID:2459, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[58992] Another function of GAM8297 is therefore inhibition of DKFZP434A0131 (Accession NP_061864.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZP434A0131.

[58993] DKFZp547J144 (Accession XP_091486.2) is another GAM8297 target gene, herein designated TARGET GENE. DKFZp547J144 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZp547J144, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp547J144 BINDING SITE, designated SEQ ID:9218, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[58994] Another function of GAM8297 is therefore inhibition of DKFZp547J144 (Accession XP_091486.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated

with DKFZp547J144.

[58995] DKFZP564M082 (Accession NP_054761.1) is another GAM8297 target gene, herein designated TARGET GENE. DKFZP564M082 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZP564M082, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP564M082 BINDING SITE, designated SEQ ID:17456, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[58996] Another function of GAM8297 is therefore inhibition of DKFZP564M082 (Accession NP_054761.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZP564M082.

[58997] DKFZp761N1114 (Accession XP_086327.6) is another GAM8297 target gene, herein designated TARGET GENE. DKFZp761N1114 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZp761N1114, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III

of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp761N1114 BINDING SITE, designated SEQ ID:1345, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[58998] Another function of GAM8297 is therefore inhibition of DKFZp761N1114 (Accession XP_086327.6) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp761N1114.

[58999] DKFZp762A217 (Accession NP_689801.1) is another GAM8297 target gene, herein designated TARGET GENE. DKFZp762A217 BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by DKFZp762A217, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp762A217 BINDING SITE, designated SEQ ID:20098, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59000] Another function of GAM8297 is therefore inhibition of DKFZp762A217 (Accession NP_689801.1) . Accordingly,

utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp762A217.

[59001] Deducator of cyto-kinesis 3 (DOCK3, Accession XP_039259.5) is another GAM8297 target gene, herein designated TARGET GENE. DOCK3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DOCK3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DOCK3 BINDING SITE, designated SEQ ID:3680, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59002] Another function of GAM8297 is therefore inhibition of Deducator of cyto-kinesis 3 (DOCK3, Accession XP_039259.5) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DOCK3.

[59003] DRIL2 (Accession NP_006456.1) is another GAM8297 target gene, herein designated TARGET GENE. DRIL2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DRIL2, corresponding to a

target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DRIL2 BINDING SITE, designated SEQ ID:1268, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59004] Another function of GAM8297 is therefore inhibition of DRIL2 (Accession NP_006456.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DRIL2.

[59005] Endothelial differentiation, sphingolipid g-protein-coupled receptor, 1 (EDG1, Accession NP_001391.2) is another GAM8297 target gene, herein designated TARGET GENE. EDG1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by EDG1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of EDG1 BINDING SITE, designated SEQ ID:11979, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59006] Another function of GAM8297 is therefore inhibition of Endothelial differentiation, sphingolipid g-pro-

tein-coupled receptor, 1 (EDG1, Accession NP_001391.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with EDG1.

[59007] Endothelin 3 (EDN3, Accession NP_000105.1) is another GAM8297 target gene, herein designated TARGET GENE. EDN3 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by EDN3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of EDN3 BINDING SITE, designated SEQ ID:18442, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59008] Another function of GAM8297 is therefore inhibition of Endothelin 3 (EDN3, Accession NP_000105.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with EDN3.

[59009] Endothelin receptor type a (EDNRA, Accession NP_001948.1) is another GAM8297 target gene, herein designated TARGET GENE. EDNRA BINDING SITE is a target binding site found in the 3' untranslated region of mRNA

encoded by EDNRA, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of EDNRA BINDING SITE, designated SEQ ID:14062, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59010] Another function of GAM8297 is therefore inhibition of Endothelin receptor type a (EDNRA, Accession NP_001948.1), a gene which binds endothelins, and induces intracellular calcium flux and arachidonic acid accumulation and therefore may be associated with Resistance to migraine. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of Resistance to migraine, and of other diseases and clinical conditions associated with EDNRA.

[59011] The function of EDNRA and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM627.1.Egf-like-domain, multiple 4 (EGFL4, Accession XP_290821.1) is another GAM8297 target gene, herein designated TARGET GENE. EGFL4 BINDING SITE is a target binding site found in the 3' untranslated region of

mRNA encoded by EGFL4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of EGFL4 BINDING SITE, designated SEQ ID:15348, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59012] Another function of GAM8297 is therefore inhibition of Egf-like-domain, multiple 4 (EGFL4, Accession XP_290821.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with EGFL4.

[59013] Er to nucleus signalling 1 (ERN1, Accession NP_001424.1) is another GAM8297 target gene, herein designated TARGET GENE. ERN1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ERN1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ERN1 BINDING SITE, designated SEQ ID:14185, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59014] Another function of GAM8297 is therefore inhibition of Er

to nucleus signalling 1 (ERN1, Accession NP_001424.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ERN1.

[59015] FLJ10521 (Accession NP_060595.1) is another GAM8297 target gene, herein designated TARGET GENE. FLJ10521 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ10521, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ10521 BINDING SITE, designated SEQ ID:9343, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59016] Another function of GAM8297 is therefore inhibition of FLJ10521 (Accession NP_060595.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ10521.

[59017] FLJ10786 (Accession NP_060689.1) is another GAM8297 target gene, herein designated TARGET GENE. FLJ10786 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ10786, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ10786 BINDING SITE, designated SEQ ID:3362, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59018] Another function of GAM8297 is therefore inhibition of FLJ10786 (Accession NP_060689.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ10786.

[59019] FLJ10803 (Accession NP_060694.1) is another GAM8297 target gene, herein designated TARGET GENE. FLJ10803 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ10803, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ10803 BINDING SITE, designated SEQ ID:13516, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59020] Another function of GAM8297 is therefore inhibition of FLJ10803 (Accession NP_060694.1) . Accordingly, utilities

of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ10803.

[59021] FLJ10895 (Accession NP_061957.1) is another GAM8297 target gene, herein designated TARGET GENE. FLJ10895 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ10895, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ10895 BINDING SITE, designated SEQ ID:15940, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59022] Another function of GAM8297 is therefore inhibition of FLJ10895 (Accession NP_061957.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ10895.

[59023] FLJ11539 (Accession NP_079024.1) is another GAM8297 target gene, herein designated TARGET GENE. FLJ11539 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ11539, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ11539 BINDING SITE, designated SEQ ID:12818, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59024] Another function of GAM8297 is therefore inhibition of FLJ11539 (Accession NP_079024.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ11539.

[59025] FLJ12660 (Accession NP_079428.1) is another GAM8297 target gene, herein designated TARGET GENE. FLJ12660 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ12660, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ12660 BINDING SITE, designated SEQ ID:1015, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59026] Another function of GAM8297 is therefore inhibition of FLJ12660 (Accession NP_079428.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment

of diseases and clinical conditions associated with FLJ12660.

[59027] FLJ12788 (Accession NP_071937.1) is another GAM8297 target gene, herein designated TARGET GENE. FLJ12788 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ12788, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ12788 BINDING SITE, designated SEQ ID:16212, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59028] Another function of GAM8297 is therefore inhibition of FLJ12788 (Accession NP_071937.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ12788.

[59029] FLJ14260 (Accession NP_079303.2) is another GAM8297 target gene, herein designated TARGET GENE. FLJ14260 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FLJ14260, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of FLJ14260 BINDING SITE, designated SEQ ID:10780, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59030] Another function of GAM8297 is therefore inhibition of FLJ14260 (Accession NP_079303.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ14260.

[59031] FLJ14827 (Accession NP_116237.1) is another GAM8297 target gene, herein designated TARGET GENE. FLJ14827 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ14827, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ14827 BINDING SITE, designated SEQ ID:5731, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59032] Another function of GAM8297 is therefore inhibition of FLJ14827 (Accession NP_116237.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

FLJ14827.

[59033] FLJ20079 (Accession NP_060126.1) is another GAM8297 target gene, herein designated TARGET GENE. FLJ20079 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ20079, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20079 BINDING SITE, designated SEQ ID:2651, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59034] Another function of GAM8297 is therefore inhibition of FLJ20079 (Accession NP_060126.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20079.

[59035] FLJ20364 (Accession NP_060255.2) is another GAM8297 target gene, herein designated TARGET GENE. FLJ20364 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ20364, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

FLJ20364 BINDING SITE, designated SEQ ID:12890, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59036] Another function of GAM8297 is therefore inhibition of FLJ20364 (Accession NP_060255.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20364.

[59037] FLJ20502 (Accession NP_060315.1) is another GAM8297 target gene, herein designated TARGET GENE. FLJ20502 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ20502, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20502 BINDING SITE, designated SEQ ID:19215, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59038] Another function of GAM8297 is therefore inhibition of FLJ20502 (Accession NP_060315.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20502.

[59039] FLJ20605 (Accession NP_060368.2) is another GAM8297 target gene, herein designated TARGET GENE. FLJ20605 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ20605, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20605 BINDING SITE, designated SEQ ID:2121, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59040] Another function of GAM8297 is therefore inhibition of FLJ20605 (Accession NP_060368.2). Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20605.

[59041] FLJ23056 (Accession NP_078858.1) is another GAM8297 target gene, herein designated TARGET GENE. FLJ23056 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FLJ23056, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ23056 BINDING SITE, designated SEQ ID:15786, to the

nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59042] Another function of GAM8297 is therefore inhibition of FLJ23056 (Accession NP_078858.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ23056.

[59043] FLJ23323 (Accession NP_078930.1) is another GAM8297 target gene, herein designated TARGET GENE. FLJ23323 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ23323, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ23323 BINDING SITE, designated SEQ ID:18937, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59044] Another function of GAM8297 is therefore inhibition of FLJ23323 (Accession NP_078930.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ23323.

[59045] FLJ30934 (Accession NP_689973.1) is another GAM8297

target gene, herein designated TARGET GENE. FLJ30934 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ30934, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ30934 BINDING SITE, designated SEQ ID:18669, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59046] Another function of GAM8297 is therefore inhibition of FLJ30934 (Accession NP_689973.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ30934.

[59047] FLJ31349 (Accession NP_775786.1) is another GAM8297 target gene, herein designated TARGET GENE. FLJ31349 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ31349, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ31349 BINDING SITE, designated SEQ ID:10144, to the nucleotide sequence of GAM8297 RNA, herein designated

GAM RNA, also designated SEQ ID:367.

[59048] Another function of GAM8297 is therefore inhibition of FLJ31349 (Accession NP_775786.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ31349.

[59049] FLJ32029 (Accession NP_775853.2) is another GAM8297 target gene, herein designated TARGET GENE. FLJ32029 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ32029, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ32029 BINDING SITE, designated SEQ ID:15817, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59050] Another function of GAM8297 is therefore inhibition of FLJ32029 (Accession NP_775853.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ32029.

[59051] FLJ33298 (Accession NP_775907.1) is another GAM8297 target gene, herein designated TARGET GENE. FLJ33298

BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ33298, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ33298 BINDING SITE, designated SEQ ID:10479, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59052] Another function of GAM8297 is therefore inhibition of FLJ33298 (Accession NP_775907.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ33298.

[59053] FLJ33610 (Accession NP_775968.1) is another GAM8297 target gene, herein designated TARGET GENE. FLJ33610 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ33610, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ33610 BINDING SITE, designated SEQ ID:2606, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59054] Another function of GAM8297 is therefore inhibition of FLJ33610 (Accession NP_775968.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ33610.

[59055] FLJ35838 (Accession NP_775803.1) is another GAM8297 target gene, herein designated TARGET GENE. FLJ35838 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ35838, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ35838 BINDING SITE, designated SEQ ID:6529, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59056] Another function of GAM8297 is therefore inhibition of FLJ35838 (Accession NP_775803.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ35838.

[59057] FLJ36576 (Accession NP_775793.1) is another GAM8297 target gene, herein designated TARGET GENE. FLJ36576 BINDING SITE is a target binding site found in the 3' un-

translated region of mRNA encoded by FLJ36576, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ36576 BINDING SITE, designated SEQ ID:8645, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59058] Another function of GAM8297 is therefore inhibition of FLJ36576 (Accession NP_775793.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ36576.

[59059] FLJ37318 (Accession NP_689799.1) is another GAM8297 target gene, herein designated TARGET GENE. FLJ37318 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FLJ37318, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ37318 BINDING SITE, designated SEQ ID:5684, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59060] Another function of GAM8297 is therefore inhibition of

FLJ37318 (Accession NP_689799.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ37318.

[59061] FLJ38608 (Accession NP_694947.1) is another GAM8297 target gene, herein designated TARGET GENE. FLJ38608 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ38608, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ38608 BINDING SITE, designated SEQ ID:5277, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59062] Another function of GAM8297 is therefore inhibition of FLJ38608 (Accession NP_694947.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ38608.

[59063] FLJ39117 (Accession NP_689577.1) is another GAM8297 target gene, herein designated TARGET GENE. FLJ39117 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ39117, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ39117 BINDING SITE, designated SEQ ID:8551, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59064] Another function of GAM8297 is therefore inhibition of FLJ39117 (Accession NP_689577.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ39117.

[59065] FLJ40160 (Accession NP_775755.2) is another GAM8297 target gene, herein designated TARGET GENE. FLJ40160 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ40160, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ40160 BINDING SITE, designated SEQ ID:14835, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59066] Another function of GAM8297 is therefore inhibition of FLJ40160 (Accession NP_775755.2) . Accordingly, utilities

of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ40160.

[59067] Forkhead box d2 (FOXD2, Accession NP_004465.1) is another GAM8297 target gene, herein designated TARGET GENE. FOXD2 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FOXD2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FOXD2 BINDING SITE, designated SEQ ID:11152, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59068] Another function of GAM8297 is therefore inhibition of Forkhead box d2 (FOXD2, Accession NP_004465.1). Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FOXD2.

[59069] FRABIN (Accession NP_640334.1) is another GAM8297 target gene, herein designated TARGET GENE. FRABIN BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FRABIN, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FRABIN BINDING SITE, designated SEQ ID:6720, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59070] Another function of GAM8297 is therefore inhibition of FRABIN (Accession NP_640334.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FRABIN.

[59071] FRCP2 (Accession NP_715637.1) is another GAM8297 target gene, herein designated TARGET GENE. FRCP2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FRCP2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FRCP2 BINDING SITE, designated SEQ ID:9651, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59072] Another function of GAM8297 is therefore inhibition of FRCP2 (Accession NP_715637.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of

diseases and clinical conditions associated with FRCP2.

[59073] Follistatin-like 1 (FSTL1, Accession NP_009016.1) is another GAM8297 target gene, herein designated TARGET GENE. FSTL1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FSTL1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FSTL1 BINDING SITE, designated SEQ ID:17836, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59074] Another function of GAM8297 is therefore inhibition of Follistatin-like 1 (FSTL1, Accession NP_009016.1), a gene which may modulate the action of some growth factors on cell proliferation and differentiation. and therefore may be associated with Rheumatoid arthritis. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of Rheumatoid arthritis., and of other diseases and clinical conditions associated with FSTL1.

[59075] The function of FSTL1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM279.1.G2A (Accession NP_037477.1) is another

GAM8297 target gene, herein designated TARGET GENE. G2A BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by G2A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of G2A BINDING SITE, designated SEQ ID:18565, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59076] Another function of GAM8297 is therefore inhibition of G2A (Accession NP_037477.1), a gene which may mediate some of the effects of extracellular atp on insulin secretion. and therefore may be associated with Autoimmune disease. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of Autoimmune disease., and of other diseases and clinical conditions associated with G2A.

[59077] The function of G2A and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1.Grb2-associated binding protein 3 (GAB3, Accession NP_542179.1) is another GAM8297 target gene, herein designated TARGET GENE. GAB3 BINDING SITE is a

target binding site found in the 3' untranslated region of mRNA encoded by GAB3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GAB3 BINDING SITE, designated SEQ ID:14391, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59078] Another function of GAM8297 is therefore inhibition of Grb2-associated binding protein 3 (GAB3, Accession NP_542179.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GAB3.

[59079] Glutamine-fructose-6-phosphate transaminase 2 (GFPT2, Accession NP_005101.1) is another GAM8297 target gene, herein designated TARGET GENE. GFPT2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GFPT2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GFPT2 BINDING SITE, designated SEQ ID:12066, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also design-

nated SEQ ID:367.

[59080] Another function of GAM8297 is therefore inhibition of Glutamine-fructose-6-phosphate transaminase 2 (GFPT2, Accession NP_005101.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GFPT2.

[59081] G protein-coupled receptor 87 (GPR87, Accession NP_076404.2) is another GAM8297 target gene, herein designated TARGET GENE. GPR87 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by GPR87, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GPR87 BINDING SITE, designated SEQ ID:11836, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59082] Another function of GAM8297 is therefore inhibition of G protein-coupled receptor 87 (GPR87, Accession NP_076404.2), a gene which plays a role in cell communication. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GPR87.

[59083] The function of GPR87 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM588.1.G protein-coupled receptor, family c, group 5, member c (GPC5C, Accession NP_061123.2) is another GAM8297 target gene, herein designated TARGET GENE. GPCR5C BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by GPCR5C, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GPCR5C BINDING SITE, designated SEQ ID:8211, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59084] Another function of GAM8297 is therefore inhibition of G protein-coupled receptor, family c, group 5, member c (GPC5C, Accession NP_061123.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GPCR5C.

[59085] G protein pathway suppressor 2 (GPS2, Accession NP_004480.1) is another GAM8297 target gene, herein

designated TARGET GENE. GPS2 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by GPS2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GPS2 BINDING SITE, designated SEQ ID:13607, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59086] Another function of GAM8297 is therefore inhibition of G protein pathway suppressor 2 (GPS2, Accession NP_004480.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GPS2.

[59087] Guanylate kinase 1 (GUK1, Accession NP_000849.1) is another GAM8297 target gene, herein designated TARGET GENE. GUK1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GUK1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GUK1 BINDING SITE, designated SEQ ID:11774, to the nucleotide sequence of GAM8297 RNA, herein des-

ignated GAM RNA, also designated SEQ ID:367.

[59088] Another function of GAM8297 is therefore inhibition of Guanylate kinase 1 (GUK1, Accession NP_000849.1), a gene which converts GMP to GTP as part of the cGMP cycle and essential for recycling gmp and indirectly, cgmp. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GUK1.

[59089] The function of GUK1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM849.1. Histone deacetylase 1 (HDAC1, Accession NP_004955.2) is another GAM8297 target gene, herein designated TARGET GENE. HDAC1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HDAC1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HDAC1 BINDING SITE, designated SEQ ID:4562, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59090] Another function of GAM8297 is therefore inhibition of

Histone deacetylase 1 (HDAC1, Accession NP_004955.2), a gene which is responsible for the deacetylation of lysine residues on the n- terminal part of the core histones (h2a, h2b, h3 and h4) which plays an important role in transcriptional regulation, cell cycle progression and developmental events. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HDAC1.

[59091] The function of HDAC1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM445.2.Hedgehog interacting protein (HHIP, Accession NP_071920.1) is another GAM8297 target gene, herein designated TARGET GENE. HHIP BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by HHIP, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HHIP BINDING SITE, designated SEQ ID:842, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59092] Another function of GAM8297 is therefore inhibition of

Hedgehog interacting protein (HHIP, Accession NP_071920.1), a gene which is involved in many fundamental processes in embryonic development, including anteroposterior patterns of limbs and regulation of left-right asymmetry. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HHIP.

[59093] The function of HHIP and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM700.1. Heterogeneous nuclear ribonucleoprotein h3 (2h9) (HNRPH3, Accession NP_036339.1) is another GAM8297 target gene, herein designated TARGET GENE. HNRPH3 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by HNRPH3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HNRPH3 BINDING SITE, designated SEQ ID:13944, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59094] Another function of GAM8297 is therefore inhibition of

Heterogeneous nuclear ribonucleoprotein h3 (2h9) (HNRPH3, Accession NP_036339.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HNRPH3.

[59095] Heterogeneous nuclear ribonucleoprotein h3 (2h9) (HNRPH3, Accession NP_067676.2) is another GAM8297 target gene, herein designated TARGET GENE. HNRPH3 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by HNRPH3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HNRPH3 BINDING SITE, designated SEQ ID:13944, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59096] Another function of GAM8297 is therefore inhibition of Heterogeneous nuclear ribonucleoprotein h3 (2h9) (HNRPH3, Accession NP_067676.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HNRPH3.

[59097] Homeo box a1 (HOXA1, Accession NP_705873.1) is another GAM8297 target gene, herein designated TARGET GENE. HOXA1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by HOXA1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HOXA1 BINDING SITE, designated SEQ ID:18845, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59098] Another function of GAM8297 is therefore inhibition of Homeo box a1 (HOXA1, Accession NP_705873.1). Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HOXA1.

[59099] Hydroxysteroid (11-beta) dehydrogenase 2 (HSD11B2, Accession NP_000187.2) is another GAM8297 target gene, herein designated TARGET GENE. HSD11B2 BINDING SITE1 and HSD11B2 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by HSD11B2, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HSD11B2 BINDING SITE1 and HSD11B2 BINDING SITE2, designated SEQ ID:13964 and SEQ ID:15068 respectively, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59100] Another function of GAM8297 is therefore inhibition of Hydroxysteroid (11- β) dehydrogenase 2 (HSD11B2, Accession NP_000187.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HSD11B2.

[59101] Heat shock 70kda protein 5 (glucose-regulated protein, 78kda) (HSPA5, Accession NP_005338.1) is another GAM8297 target gene, herein designated TARGET GENE. HSPA5 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HSPA5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HSPA5 BINDING SITE, designated SEQ ID:12356, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59102] Another function of GAM8297 is therefore inhibition of

Heat shock 70kda protein 5 (glucose-regulated protein, 78kda) (HSPA5, Accession NP_005338.1), a gene which is involved in the folding and assembly of proteins in the endoplasmic reticulum (ER). Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HSPA5.

[59103] The function of HSPA5 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM72.1. Interferon-induced protein with tetratricopeptide repeats 2 (IFIT2, Accession NP_001538.2) is another GAM8297 target gene, herein designated TARGET GENE. IFIT2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by IFIT2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IFIT2 BINDING SITE, designated SEQ ID:13164, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59104] Another function of GAM8297 is therefore inhibition of Interferon-induced protein with tetratricopeptide repeats 2 (IFIT2, Accession NP_001538.2). Accordingly, utilities of

GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with IFIT2.

[59105] Interleukin 17d (IL17D, Accession NP_612141.1) is another GAM8297 target gene, herein designated TARGET GENE. IL17D BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by IL17D, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IL17D BINDING SITE, designated SEQ ID:1766, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59106] Another function of GAM8297 is therefore inhibition of Interleukin 17d (IL17D, Accession NP_612141.1). Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with IL17D.

[59107] Interleukin 8 receptor, alpha (IL8RA, Accession NP_000625.1) is another GAM8297 target gene, herein designated TARGET GENE. IL8RA BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by IL8RA, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III

of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IL8RA BINDING SITE, designated SEQ ID:1110, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59108] Another function of GAM8297 is therefore inhibition of Interleukin 8 receptor, alpha (IL8RA, Accession NP_000625.1), a gene which is the receptor to interleukin- 8, which is a powerful neutrophils chemotactic factor. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with IL8RA.

[59109] The function of IL8RA and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM680.1. Insulin receptor substrate 3-like (IRS3L, Accession XP_295210.1) is another GAM8297 target gene, herein designated TARGET GENE. IRS3L BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by IRS3L, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IRS3L BINDING SITE,

designated SEQ ID:14904, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59110] Another function of GAM8297 is therefore inhibition of Insulin receptor substrate 3-like (IRS3L, Accession XP_295210.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with IRS3L.

[59111] Jade-1 (Accession NP_079176.2) is another GAM8297 target gene, herein designated TARGET GENE. Jade-1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by Jade-1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of Jade-1 BINDING SITE, designated SEQ ID:7801, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59112] Another function of GAM8297 is therefore inhibition of Jade-1 (Accession NP_079176.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with Jade-1.

[59113] Potassium voltage-gated channel, shaker-related subfam-

ily, member 6 (KCNA6, Accession NP_002226.1) is another GAM8297 target gene, herein designated TARGET GENE. KCNA6 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KCNA6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KCNA6 BINDING SITE, designated SEQ ID:12111, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59114] Another function of GAM8297 is therefore inhibition of Potassium voltage-gated channel, shaker-related subfamily, member 6 (KCNA6, Accession NP_002226.1), a gene which mediates the voltage-dependent potassium ion permeability of excitable membranes. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KCNA6.

[59115] The function of KCNA6 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM63.1.KCNIP4 (Accession NP_671711.1) is another

GAM8297 target gene, herein designated TARGET GENE. KCNIP4 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by KCNIP4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KCNIP4 BINDING SITE, designated SEQ ID:4158, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59116] Another function of GAM8297 is therefore inhibition of KCNIP4 (Accession NP_671711.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KCNIP4.

[59117] KIAA0040 (Accession NP_055471.1) is another GAM8297 target gene, herein designated TARGET GENE. KIAA0040 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0040, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0040 BINDING SITE, designated SEQ ID:1670, to the nucleotide sequence of GAM8297 RNA, herein designated

GAM RNA, also designated SEQ ID:367.

[59118] Another function of GAM8297 is therefore inhibition of KIAA0040 (Accession NP_055471.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0040.

[59119] KIAA0125 (Accession NP_055607.1) is another GAM8297 target gene, herein designated TARGET GENE. KIAA0125 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0125, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0125 BINDING SITE, designated SEQ ID:5670, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59120] Another function of GAM8297 is therefore inhibition of KIAA0125 (Accession NP_055607.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0125.

[59121] KIAA0265 (Accession XP_045954.2) is another GAM8297 target gene, herein designated TARGET GENE. KIAA0265

BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0265, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0265 BINDING SITE, designated SEQ ID:7732, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59122] Another function of GAM8297 is therefore inhibition of KIAA0265 (Accession XP_045954.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0265.

[59123] KIAA0295 (Accession XP_042833.2) is another GAM8297 target gene, herein designated TARGET GENE. KIAA0295 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0295, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0295 BINDING SITE, designated SEQ ID:12348, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59124] Another function of GAM8297 is therefore inhibition of KIAA0295 (Accession XP_042833.2). Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0295.

[59125] KIAA0296 (Accession NP_055514.1) is another GAM8297 target gene, herein designated TARGET GENE. KIAA0296 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0296, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0296 BINDING SITE, designated SEQ ID:19626, to the

nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59126] Another function of GAM8297 is therefore inhibition of KIAA0296 (Accession NP_055514.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0296.

[59127] KIAA0377 (Accession NP_055474.1) is another GAM8297 target gene, herein designated TARGET GENE. KIAA0377 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0377, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0377 BINDING SITE, designated SEQ ID:4379, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59128] Another function of GAM8297 is therefore inhibition of KIAA0377 (Accession NP_055474.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0377.

[59129] KIAA0657 (Accession XP_051017.2) is another GAM8297

target gene, herein designated TARGET GENE. KIAA0657 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0657, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0657 BINDING SITE, designated SEQ ID:15617, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59130] Another function of GAM8297 is therefore inhibition of KIAA0657 (Accession XP_051017.2). Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0657.

[59131] KIAA0795 (Accession NP_079286.1) is another GAM8297 target gene, herein designated TARGET GENE. KIAA0795 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by KIAA0795, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0795 BINDING SITE, designated SEQ ID:18730, to the nucleotide sequence of GAM8297 RNA, herein designated

GAM RNA, also designated SEQ ID:367.

[59132] Another function of GAM8297 is therefore inhibition of KIAA0795 (Accession NP_079286.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0795.

[59133] KIAA0953 (Accession XP_039733.2) is another GAM8297 target gene, herein designated TARGET GENE. KIAA0953 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0953, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0953 BINDING SITE, designated SEQ ID:4538, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59134] Another function of GAM8297 is therefore inhibition of KIAA0953 (Accession XP_039733.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0953.

[59135] KIAA1010 (Accession XP_050742.5) is another GAM8297 target gene, herein designated TARGET GENE. KIAA1010

BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1010, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1010 BINDING SITE, designated SEQ ID:19015, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59136] Another function of GAM8297 is therefore inhibition of KIAA1010 (Accession XP_050742.5) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1010.

[59137] KIAA1069 (Accession XP_042635.3) is another GAM8297 target gene, herein designated TARGET GENE. KIAA1069 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1069, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1069 BINDING SITE, designated SEQ ID:5233, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59138] Another function of GAM8297 is therefore inhibition of KIAA1069 (Accession XP_042635.3) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1069.

[59139] KIAA1126 (Accession XP_050325.1) is another GAM8297 target gene, herein designated TARGET GENE. KIAA1126 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1126, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1126 BINDING SITE, designated SEQ ID:18824, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59140] Another function of GAM8297 is therefore inhibition of KIAA1126 (Accession XP_050325.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1126.

[59141] KIAA1198 (Accession NP_065765.1) is another GAM8297 target gene, herein designated TARGET GENE. KIAA1198 BINDING SITE is a target binding site found in the 3' un-

translated region of mRNA encoded by KIAA1198, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1198 BINDING SITE, designated SEQ ID:12870, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59142] Another function of GAM8297 is therefore inhibition of KIAA1198 (Accession NP_065765.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1198.

[59143] KIAA1271 (Accession XP_045472.1) is another GAM8297 target gene, herein designated TARGET GENE. KIAA1271 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1271, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1271 BINDING SITE, designated SEQ ID:11062, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59144] Another function of GAM8297 is therefore inhibition of

KIAA1271 (Accession XP_045472.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1271.

[59145] KIAA1322 (Accession NP_065824.1) is another GAM8297 target gene, herein designated TARGET GENE. KIAA1322 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1322, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1322 BINDING SITE, designated SEQ ID:6018, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59146] Another function of GAM8297 is therefore inhibition of KIAA1322 (Accession NP_065824.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1322.

[59147] KIAA1328 (Accession XP_029429.4) is another GAM8297 target gene, herein designated TARGET GENE. KIAA1328 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1328, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1328 BINDING SITE, designated SEQ ID:11039, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59148] Another function of GAM8297 is therefore inhibition of KIAA1328 (Accession XP_029429.4) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1328.

[59149] KIAA1372 (Accession XP_290527.1) is another GAM8297 target gene, herein designated TARGET GENE. KIAA1372 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1372, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1372 BINDING SITE, designated SEQ ID:11705, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59150] Another function of GAM8297 is therefore inhibition of KIAA1372 (Accession XP_290527.1) . Accordingly, utilities

of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1372.

[59151] KIAA1798 (Accession XP_027074.3) is another GAM8297 target gene, herein designated TARGET GENE. KIAA1798 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1798, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1798 BINDING SITE, designated SEQ ID:8257, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59152] Another function of GAM8297 is therefore inhibition of KIAA1798 (Accession XP_027074.3) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1798.

[59153] KIAA1937 (Accession XP_057107.3) is another GAM8297 target gene, herein designated TARGET GENE. KIAA1937 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1937, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1937 BINDING SITE, designated SEQ ID:15618, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59154] Another function of GAM8297 is therefore inhibition of KIAA1937 (Accession XP_057107.3) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1937.

[59155] KIAA1999 (Accession XP_114447.2) is another GAM8297 target gene, herein designated TARGET GENE. KIAA1999 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1999, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1999 BINDING SITE, designated SEQ ID:7678, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59156] Another function of GAM8297 is therefore inhibition of KIAA1999 (Accession XP_114447.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment

of diseases and clinical conditions associated with KIAA1999.

[59157] Kinesin heavy chain member 2 (KIF2, Accession NP_004511.1) is another GAM8297 target gene, herein designated TARGET GENE. KIF2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIF2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIF2 BINDING SITE, designated SEQ ID:4157, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59158] Another function of GAM8297 is therefore inhibition of Kinesin heavy chain member 2 (KIF2, Accession NP_004511.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIF2.

[59159] Kallikrein 10 (KLK10, Accession NP_002767.2) is another GAM8297 target gene, herein designated TARGET GENE. KLK10 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by KLK10, corresponding to a target binding site

such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KLK10 BINDING SITE, designated SEQ ID:17457, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59160] Another function of GAM8297 is therefore inhibition of Kallikrein 10 (KLK10, Accession NP_002767.2), a gene which has a tumor- suppressor role in breast and prostate cancer. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KLK10.

[59161] The function of KLK10 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM234.1. Kallikrein 10 (KLK10, Accession NP_665895.1) is another GAM8297 target gene, herein designated TARGET GENE. KLK10 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by KLK10, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

KLK10 BINDING SITE, designated SEQ ID:17457, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59162] Another function of GAM8297 is therefore inhibition of Kallikrein 10 (KLK10, Accession NP_665895.1), a gene which has a tumor- suppressor role in breast and prostate cancer. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KLK10.

[59163] The function of KLK10 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM234.1. Karyopherin alpha 3 (importin alpha 4) (KPNA3, Accession NP_002258.1) is another GAM8297 target gene, herein designated TARGET GENE. KPNA3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KPNA3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KPNA3 BINDING SITE, designated SEQ ID:3939, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59164] Another function of GAM8297 is therefore inhibition of Karyopherin alpha 3 (importin alpha 4) (KPNA3, Accession NP_002258.1), a gene which seems to act as a cytosolic receptor for both simple and bipartite nls motifs. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KPNA3.

[59165] The function of KPNA3 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM67.1. Keratin 8 (KRT8, Accession NP_002264.1) is another GAM8297 target gene, herein designated TARGET GENE. KRT8 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KRT8, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KRT8 BINDING SITE, designated SEQ ID:9986, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59166] Another function of GAM8297 is therefore inhibition of Keratin 8 (KRT8, Accession NP_002264.1), a gene which may form intermediate filaments; type II keratin, member

of a family of structural proteins and therefore may be associated with Cirrhosis, cryptogenic. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of Cirrhosis, cryptogenic, and of other diseases and clinical conditions associated with KRT8.

[59167] The function of KRT8 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM374.2. Lag1 longevity assurance homolog 1 (*s. cerevisiae*) (LASS1, Accession NP_067090.1) is another GAM8297 target gene, herein designated TARGET GENE. LASS1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LASS1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LASS1 BINDING SITE, designated SEQ ID:8142, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59168] Another function of GAM8297 is therefore inhibition of Lag1 longevity assurance homolog 1 (*s. cerevisiae*) (LASS1, Accession NP_067090.1), a gene which may mediate cell differentiation events during embryonic develop-

ment. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LASS1.

[59169] The function of LASS1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM223.1. Leucine-rich repeat lgi family, member 3 (LGI3, Accession NP_644807.1) is another GAM8297 target gene, herein designated TARGET GENE. LGI3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LGI3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LGI3 BINDING SITE, designated SEQ ID:566, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59170] Another function of GAM8297 is therefore inhibition of Leucine-rich repeat lgi family, member 3 (LGI3, Accession NP_644807.1). Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LGI3.

[59171] Lim and senescent cell antigen-like domains 1 (LIMS1,

Accession NP_004978.2) is another GAM8297 target gene, herein designated TARGET GENE. LIMS1 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LIMS1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LIMS1 BINDING SITE, designated SEQ ID:9951, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59172] Another function of GAM8297 is therefore inhibition of Lim and senescent cell antigen-like domains 1 (LIMS1, Accession NP_004978.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LIMS1.

[59173] LOC114987 (Accession NP_660284.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC114987 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC114987, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC114987 BINDING SITE, desig-

nated SEQ ID:7181, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59174] Another function of GAM8297 is therefore inhibition of LOC114987 (Accession NP_660284.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC114987.

[59175] LOC115219 (Accession XP_055499.2) is another GAM8297 target gene, herein designated TARGET GENE. LOC115219 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC115219, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC115219 BINDING SITE, designated SEQ ID:12944, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59176] Another function of GAM8297 is therefore inhibition of LOC115219 (Accession XP_055499.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC115219.

[59177] LOC121301 (Accession XP_062574.2) is another GAM8297 target gene, herein designated TARGET GENE. LOC121301 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC121301, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC121301 BINDING SITE, designated SEQ ID:18517, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59178] Another function of GAM8297 is therefore inhibition of LOC121301 (Accession XP_062574.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC121301.

[59179] LOC122664 (Accession NP_776245.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC122664 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC122664, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC122664 BINDING SITE, designated SEQ ID:10278, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59180] Another function of GAM8297 is therefore inhibition of LOC122664 (Accession NP_776245.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC122664.

[59181] LOC126616 (Accession XP_059059.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC126616 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC126616, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC126616 BINDING SITE, designated SEQ ID:17931, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59182] Another function of GAM8297 is therefore inhibition of LOC126616 (Accession XP_059059.1) . Accordingly, utili-

ties of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC126616.

[59183] LOC127540 (Accession XP_059164.6) is another GAM8297 target gene, herein designated TARGET GENE. LOC127540 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by LOC127540, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC127540 BINDING SITE, designated SEQ ID:8397, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59184] Another function of GAM8297 is therefore inhibition of LOC127540 (Accession XP_059164.6) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC127540.

[59185] LOC136345 (Accession XP_072455.2) is another GAM8297 target gene, herein designated TARGET GENE. LOC136345 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by

LOC136345, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC136345 BINDING SITE, designated SEQ ID:12191, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59186] Another function of GAM8297 is therefore inhibition of LOC136345 (Accession XP_072455.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC136345.

[59187] LOC139201 (Accession XP_208439.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC139201 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC139201, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC139201 BINDING SITE, designated SEQ ID:10411, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59188] Another function of GAM8297 is therefore inhibition of LOC139201 (Accession XP_208439.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC139201.

[59189] LOC143458 (Accession NP_777562.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC143458 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC143458, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC143458 BINDING SITE, designated SEQ ID:10575, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59190] Another function of GAM8297 is therefore inhibition of LOC143458 (Accession NP_777562.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC143458.

[59191] LOC145828 (Accession XP_096879.1) is another GAM8297 target gene, herein designated TARGET GENE.

LOC145828 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC145828, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC145828 BINDING SITE, designated SEQ ID:7193, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59192] Another function of GAM8297 is therefore inhibition of LOC145828 (Accession XP_096879.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC145828.

[59193] LOC147991 (Accession XP_085993.3) is another GAM8297 target gene, herein designated TARGET GENE. LOC147991 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC147991, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC147991 BINDING SITE, designated SEQ ID:9617, to the nucleotide sequence of

GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59194] Another function of GAM8297 is therefore inhibition of LOC147991 (Accession XP_085993.3) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC147991.

[59195] LOC149420 (Accession NP_690048.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC149420 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC149420, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC149420 BINDING SITE, designated SEQ ID:8650, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59196] Another function of GAM8297 is therefore inhibition of LOC149420 (Accession NP_690048.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC149420.

[59197] LOC149703 (Accession XP_097719.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC149703 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC149703, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC149703 BINDING SITE, designated SEQ ID:18798, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59198] Another function of GAM8297 is therefore inhibition of LOC149703 (Accession XP_097719.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC149703.

[59199] LOC150763 (Accession XP_086996.2) is another GAM8297 target gene, herein designated TARGET GENE. LOC150763 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC150763, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC150763 BINDING SITE, designated SEQ ID:18707, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59200] Another function of GAM8297 is therefore inhibition of LOC150763 (Accession XP_086996.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC150763.

[59201] LOC151154 (Accession XP_098008.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC151154 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC151154, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC151154 BINDING SITE, designated SEQ ID:798, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59202] Another function of GAM8297 is therefore inhibition of LOC151154 (Accession XP_098008.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC151154.

[59203] LOC151178 (Accession XP_087117.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC151178 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC151178, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC151178 BINDING SITE, designated SEQ ID:4822, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59204] Another function of GAM8297 is therefore inhibition of LOC151178 (Accession XP_087117.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC151178.

[59205] LOC153516 (Accession NP_612500.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC153516 BINDING SITE1 and LOC153516 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC153516, corresponding to

target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC153516 BINDING SITE1 and LOC153516 BINDING SITE2, designated SEQ ID:7669 and SEQ ID:9799 respectively, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59206] Another function of GAM8297 is therefore inhibition of LOC153516 (Accession NP_612500.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC153516.

[59207] LOC155008 (Accession XP_088116.2) is another GAM8297 target gene, herein designated TARGET GENE. LOC155008 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC155008, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC155008 BINDING SITE, designated SEQ ID:7006, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59208] Another function of GAM8297 is therefore inhibition of LOC155008 (Accession XP_088116.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC155008.

[59209] LOC155032 (Accession XP_098647.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC155032 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC155032, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC155032 BINDING SITE, designated SEQ ID:12191, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59210] Another function of GAM8297 is therefore inhibition of LOC155032 (Accession XP_098647.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC155032.

[59211] LOC158014 (Accession XP_088442.1) is another GAM8297 target gene, herein designated TARGET GENE.

LOC158014 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC158014, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC158014 BINDING SITE, designated SEQ ID:13911, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59212] Another function of GAM8297 is therefore inhibition of LOC158014 (Accession XP_088442.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC158014.

[59213] LOC158062 (Accession XP_098861.2) is another GAM8297 target gene, herein designated TARGET GENE. LOC158062 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC158062, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC158062 BINDING SITE, designated SEQ ID:6216, to the nucleotide sequence of

GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59214] Another function of GAM8297 is therefore inhibition of LOC158062 (Accession XP_098861.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC158062.

[59215] LOC158436 (Accession XP_098942.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC158436 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC158436, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC158436 BINDING SITE, designated SEQ ID:17142, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59216] Another function of GAM8297 is therefore inhibition of LOC158436 (Accession XP_098942.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC158436.

[59217] LOC159121 (Accession XP_099028.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC159121 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC159121, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC159121 BINDING SITE, designated SEQ ID:16800, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59218] Another function of GAM8297 is therefore inhibition of LOC159121 (Accession XP_099028.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC159121.

[59219] LOC168667 (Accession XP_166592.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC168667 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC168667, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC168667 BINDING SITE, designated SEQ ID:1796, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59220] Another function of GAM8297 is therefore inhibition of LOC168667 (Accession XP_166592.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC168667.

[59221] LOC197322 (Accession NP_777577.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC197322 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC197322, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC197322 BINDING SITE, designated SEQ ID:16515, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59222] Another function of GAM8297 is therefore inhibition of LOC197322 (Accession NP_777577.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC197322.

[59223] LOC200197 (Accession XP_114148.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC200197 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC200197, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC200197 BINDING SITE, designated SEQ ID:9656, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59224] Another function of GAM8297 is therefore inhibition of LOC200197 (Accession XP_114148.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC200197.

[59225] LOC202024 (Accession XP_114422.3) is another GAM8297 target gene, herein designated TARGET GENE. LOC202024 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC202024, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC202024 BINDING SITE, designated SEQ ID:5326, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59226] Another function of GAM8297 is therefore inhibition of LOC202024 (Accession XP_114422.3) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC202024.

[59227] LOC219347 (Accession XP_167564.2) is another GAM8297 target gene, herein designated TARGET GENE. LOC219347 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC219347, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC219347 BINDING SITE, designated SEQ ID:9192, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59228] Another function of GAM8297 is therefore inhibition of

LOC219347 (Accession XP_167564.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC219347.

[59229] LOC220686 (Accession XP_167540.4) is another GAM8297 target gene, herein designated TARGET GENE. LOC220686 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC220686, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC220686 BINDING SITE, designated SEQ ID:10547, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59230] Another function of GAM8297 is therefore inhibition of LOC220686 (Accession XP_167540.4) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC220686.

[59231] LOC221061 (Accession XP_167709.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC221061 BINDING SITE1 and LOC221061 BINDING

SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC221061, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC221061 BINDING SITE1 and LOC221061 BINDING SITE2, designated SEQ ID:19881 and SEQ ID:6759 respectively, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59232] Another function of GAM8297 is therefore inhibition of LOC221061 (Accession XP_167709.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC221061.

[59233] LOC221405 (Accession XP_168138.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC221405 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC221405, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC221405 BINDING SITE, designated SEQ ID:8039, to the nucleotide sequence of

GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59234] Another function of GAM8297 is therefore inhibition of LOC221405 (Accession XP_168138.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC221405.

[59235] LOC253017 (Accession XP_171068.2) is another GAM8297 target gene, herein designated TARGET GENE. LOC253017 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC253017, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC253017 BINDING SITE, designated SEQ ID:18869, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59236] Another function of GAM8297 is therefore inhibition of LOC253017 (Accession XP_171068.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC253017.

[59237] LOC253392 (Accession XP_172857.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC253392 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC253392, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC253392 BINDING SITE, designated SEQ ID:8311, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59238] Another function of GAM8297 is therefore inhibition of LOC253392 (Accession XP_172857.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC253392.

[59239] LOC254111 (Accession XP_171440.3) is another GAM8297 target gene, herein designated TARGET GENE. LOC254111 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC254111, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC254111 BINDING SITE, designated SEQ ID:5139, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59240] Another function of GAM8297 is therefore inhibition of LOC254111 (Accession XP_171440.3) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC254111.

[59241] LOC255167 (Accession XP_173156.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC255167 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC255167, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC255167 BINDING SITE, designated SEQ ID:7969, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59242] Another function of GAM8297 is therefore inhibition of LOC255167 (Accession XP_173156.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC255167.

[59243] LOC255975 (Accession XP_171083.2) is another GAM8297 target gene, herein designated TARGET GENE. LOC255975 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC255975, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC255975 BINDING SITE, designated SEQ ID:3149, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59244] Another function of GAM8297 is therefore inhibition of LOC255975 (Accession XP_171083.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC255975.

[59245] LOC256905 (Accession XP_173031.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC256905 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC256905, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC256905 BINDING SITE, designated SEQ ID:18153, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59246] Another function of GAM8297 is therefore inhibition of LOC256905 (Accession XP_173031.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC256905.

[59247] LOC257085 (Accession XP_173226.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC257085 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC257085, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC257085 BINDING SITE, designated SEQ ID:11089, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59248] Another function of GAM8297 is therefore inhibition of

LOC257085 (Accession XP_173226.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC257085.

[59249] LOC283046 (Accession XP_208495.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC283046 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC283046, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283046 BINDING SITE, designated SEQ ID:7748, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59250] Another function of GAM8297 is therefore inhibition of LOC283046 (Accession XP_208495.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283046.

[59251] LOC283073 (Accession XP_210880.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC283073 BINDING SITE is a target binding site found in

the 5' untranslated region of mRNA encoded by LOC283073, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283073 BINDING SITE, designated SEQ ID:6474, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59252] Another function of GAM8297 is therefore inhibition of LOC283073 (Accession XP_210880.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283073.

[59253] LOC283168 (Accession XP_210910.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC283168 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC283168, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283168 BINDING SITE, designated SEQ ID:7758, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also design-

nated SEQ ID:367.

[59254] Another function of GAM8297 is therefore inhibition of LOC283168 (Accession XP_210910.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283168.

[59255] LOC283205 (Accession XP_210941.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC283205 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC283205, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283205 BINDING SITE, designated SEQ ID:12493, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59256] Another function of GAM8297 is therefore inhibition of LOC283205 (Accession XP_210941.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283205.

[59257] LOC283271 (Accession XP_208600.1) is another

GAM8297 target gene, herein designated TARGET GENE. LOC283271 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283271, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283271 BINDING SITE, designated SEQ ID:17415, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59258] Another function of GAM8297 is therefore inhibition of LOC283271 (Accession XP_208600.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283271.

[59259] LOC283274 (Accession XP_210957.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC283274 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC283274, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283274 BINDING SITE, design-

nated SEQ ID:3938, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59260] Another function of GAM8297 is therefore inhibition of LOC283274 (Accession XP_210957.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283274.

[59261] LOC283376 (Accession XP_211002.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC283376 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC283376, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283376 BINDING SITE, designated SEQ ID:17261, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59262] Another function of GAM8297 is therefore inhibition of LOC283376 (Accession XP_211002.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC283376.

[59263] LOC283532 (Accession XP_208096.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC283532 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283532, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283532 BINDING SITE, designated SEQ ID:6241, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59264] Another function of GAM8297 is therefore inhibition of LOC283532 (Accession XP_208096.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283532.

[59265] LOC283534 (Accession XP_211083.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC283534 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283534, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283534 BINDING SITE, designated SEQ ID:16651, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59266] Another function of GAM8297 is therefore inhibition of LOC283534 (Accession XP_211083.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283534.

[59267] LOC283744 (Accession XP_208817.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC283744 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283744, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283744 BINDING SITE, designated SEQ ID:8051, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59268] Another function of GAM8297 is therefore inhibition of LOC283744 (Accession XP_208817.1) . Accordingly, utili-

ties of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283744.

[59269] LOC283776 (Accession XP_211196.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC283776 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC283776, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283776 BINDING SITE, designated SEQ ID:9843, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59270] Another function of GAM8297 is therefore inhibition of LOC283776 (Accession XP_211196.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283776.

[59271] LOC283778 (Accession XP_211199.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC283778 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by

LOC283778, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283778 BINDING SITE, designated SEQ ID:13762, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59272] Another function of GAM8297 is therefore inhibition of LOC283778 (Accession XP_211199.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283778.

[59273] LOC283841 (Accession XP_211227.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC283841 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283841, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283841 BINDING SITE, designated SEQ ID:10880, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59274] Another function of GAM8297 is therefore inhibition of LOC283841 (Accession XP_211227.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283841.

[59275] LOC283932 (Accession NP_787097.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC283932 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283932, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283932 BINDING SITE, designated SEQ ID:10210, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59276] Another function of GAM8297 is therefore inhibition of LOC283932 (Accession NP_787097.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283932.

[59277] LOC284015 (Accession XP_210324.1) is another GAM8297 target gene, herein designated TARGET GENE.

LOC284015 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC284015, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284015 BINDING SITE, designated SEQ ID:14152, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59278] Another function of GAM8297 is therefore inhibition of LOC284015 (Accession XP_210324.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284015.

[59279] LOC284061 (Accession XP_211318.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC284061 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC284061, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284061 BINDING SITE, designated SEQ ID:6093, to the nucleotide sequence of

GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59280] Another function of GAM8297 is therefore inhibition of LOC284061 (Accession XP_211318.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284061.

[59281] LOC284080 (Accession XP_211322.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC284080 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC284080, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284080 BINDING SITE, designated SEQ ID:875, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59282] Another function of GAM8297 is therefore inhibition of LOC284080 (Accession XP_211322.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284080.

[59283] LOC284095 (Accession XP_211324.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC284095 BINDING SITE1 and LOC284095 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC284095, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284095 BINDING SITE1 and LOC284095 BINDING SITE2, designated SEQ ID:812 and SEQ ID:3574 respectively, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59284] Another function of GAM8297 is therefore inhibition of LOC284095 (Accession XP_211324.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284095.

[59285] LOC284113 (Accession XP_209021.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC284113 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC284113, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284113 BINDING SITE, designated SEQ ID:8034, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59286] Another function of GAM8297 is therefore inhibition of LOC284113 (Accession XP_209021.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284113.

[59287] LOC284133 (Accession XP_211346.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC284133 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284133, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284133 BINDING SITE, designated SEQ ID:7562, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59288] Another function of GAM8297 is therefore inhibition of LOC284133 (Accession XP_211346.1) . Accordingly, utili-

ties of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284133.

[59289] LOC284252 (Accession XP_209091.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC284252 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284252, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284252 BINDING SITE, designated SEQ ID:17032, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59290] Another function of GAM8297 is therefore inhibition of LOC284252 (Accession XP_209091.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284252.

[59291] LOC284613 (Accession XP_209289.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC284613 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by

LOC284613, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284613 BINDING SITE, designated SEQ ID:6319, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59292] Another function of GAM8297 is therefore inhibition of LOC284613 (Accession XP_209289.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284613.

[59293] LOC284642 (Accession XP_208231.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC284642 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284642, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284642 BINDING SITE, designated SEQ ID:1268, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59294] Another function of GAM8297 is therefore inhibition of LOC284642 (Accession XP_208231.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284642.

[59295] LOC284667 (Accession XP_010647.5) is another GAM8297 target gene, herein designated TARGET GENE. LOC284667 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by LOC284667, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284667 BINDING SITE, designated SEQ ID:16211, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59296] Another function of GAM8297 is therefore inhibition of LOC284667 (Accession XP_010647.5) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284667.

[59297] LOC284732 (Accession XP_211608.1) is another GAM8297 target gene, herein designated TARGET GENE.

LOC284732 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284732, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284732 BINDING SITE, designated SEQ ID:9135, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59298] Another function of GAM8297 is therefore inhibition of LOC284732 (Accession XP_211608.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284732.

[59299] LOC284930 (Accession XP_211692.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC284930 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC284930, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284930 BINDING SITE, designated SEQ ID:11674, to the nucleotide sequence of

GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59300] Another function of GAM8297 is therefore inhibition of LOC284930 (Accession XP_211692.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284930.

[59301] LOC285033 (Accession XP_211739.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC285033 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC285033, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285033 BINDING SITE, designated SEQ ID:13545, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59302] Another function of GAM8297 is therefore inhibition of LOC285033 (Accession XP_211739.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285033.

[59303] LOC285052 (Accession XP_211751.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC285052 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285052, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285052 BINDING SITE, designated SEQ ID:20075, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59304] Another function of GAM8297 is therefore inhibition of LOC285052 (Accession XP_211751.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285052.

[59305] LOC285152 (Accession XP_211783.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC285152 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC285152, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC285152 BINDING SITE, designated SEQ ID:20164, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59306] Another function of GAM8297 is therefore inhibition of LOC285152 (Accession XP_211783.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285152.

[59307] LOC285397 (Accession XP_211876.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC285397 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC285397, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285397 BINDING SITE, designated SEQ ID:5993, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59308] Another function of GAM8297 is therefore inhibition of LOC285397 (Accession XP_211876.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC285397.

[59309] LOC285467 (Accession XP_211907.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC285467 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285467, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285467 BINDING SITE, designated SEQ ID:19782, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59310] Another function of GAM8297 is therefore inhibition of LOC285467 (Accession XP_211907.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285467.

[59311] LOC285488 (Accession XP_211914.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC285488 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285488, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285488 BINDING SITE, designated SEQ ID:15176, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59312] Another function of GAM8297 is therefore inhibition of LOC285488 (Accession XP_211914.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285488.

[59313] LOC285638 (Accession XP_209693.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC285638 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC285638, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285638 BINDING SITE, designated SEQ ID:12828, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59314] Another function of GAM8297 is therefore inhibition of

LOC285638 (Accession XP_209693.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285638.

[59315] LOC285708 (Accession XP_209729.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC285708 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC285708, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285708 BINDING SITE, designated SEQ ID:1780, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59316] Another function of GAM8297 is therefore inhibition of LOC285708 (Accession XP_209729.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285708.

[59317] LOC285843 (Accession XP_212034.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC285843 BINDING SITE is a target binding site found in

the 5' untranslated region of mRNA encoded by LOC285843, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285843 BINDING SITE, designated SEQ ID:679, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59318] Another function of GAM8297 is therefore inhibition of LOC285843 (Accession XP_212034.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285843.

[59319] LOC286044 (Accession XP_212150.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC286044 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286044, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286044 BINDING SITE, designated SEQ ID:5140, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also design-

nated SEQ ID:367.

[59320] Another function of GAM8297 is therefore inhibition of LOC286044 (Accession XP_212150.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286044.

[59321] LOC286055 (Accession XP_210815.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC286055 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC286055, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286055 BINDING SITE, designated SEQ ID:4656, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59322] Another function of GAM8297 is therefore inhibition of LOC286055 (Accession XP_210815.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286055.

[59323] LOC286059 (Accession XP_212156.1) is another

GAM8297 target gene, herein designated TARGET GENE. LOC286059 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286059, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286059 BINDING SITE, designated SEQ ID:8210, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59324] Another function of GAM8297 is therefore inhibition of LOC286059 (Accession XP_212156.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286059.

[59325] LOC286402 (Accession XP_208415.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC286402 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286402, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286402 BINDING SITE, design-

nated SEQ ID:10137, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59326] Another function of GAM8297 is therefore inhibition of LOC286402 (Accession XP_208415.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286402.

[59327] LOC286532 (Accession XP_210093.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC286532 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286532, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286532 BINDING SITE, designated SEQ ID:4342, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59328] Another function of GAM8297 is therefore inhibition of LOC286532 (Accession XP_210093.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC286532.

[59329] LOC338817 (Accession XP_290588.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC338817 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC338817, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338817 BINDING SITE, designated SEQ ID:17184, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59330] Another function of GAM8297 is therefore inhibition of LOC338817 (Accession XP_290588.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC338817.

[59331] LOC338913 (Accession XP_292272.2) is another GAM8297 target gene, herein designated TARGET GENE. LOC338913 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC338913, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338913 BINDING SITE, designated SEQ ID:4981, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59332] Another function of GAM8297 is therefore inhibition of LOC338913 (Accession XP_292272.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC338913.

[59333] LOC339154 (Accession XP_294832.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC339154 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339154, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339154 BINDING SITE, designated SEQ ID:11902, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59334] Another function of GAM8297 is therefore inhibition of LOC339154 (Accession XP_294832.1) . Accordingly, utili-

ties of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339154.

[59335] LOC339287 (Accession XP_290800.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC339287 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339287, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339287 BINDING SITE, designated SEQ ID:19822, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59336] Another function of GAM8297 is therefore inhibition of LOC339287 (Accession XP_290800.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339287.

[59337] LOC339400 (Accession XP_294926.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC339400 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by

LOC339400, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339400 BINDING SITE, designated SEQ ID:2239, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59338] Another function of GAM8297 is therefore inhibition of LOC339400 (Accession XP_294926.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339400.

[59339] LOC339445 (Accession XP_291487.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC339445 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC339445, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339445 BINDING SITE, designated SEQ ID:14065, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59340] Another function of GAM8297 is therefore inhibition of LOC339445 (Accession XP_291487.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339445.

[59341] LOC339458 (Accession XP_290911.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC339458 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339458, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339458 BINDING SITE, designated SEQ ID:11960, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59342] Another function of GAM8297 is therefore inhibition of LOC339458 (Accession XP_290911.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339458.

[59343] LOC339887 (Accession XP_295094.1) is another GAM8297 target gene, herein designated TARGET GENE.

LOC339887 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339887, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339887 BINDING SITE, designated SEQ ID:11787, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59344] Another function of GAM8297 is therefore inhibition of LOC339887 (Accession XP_295094.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339887.

[59345] LOC339942 (Accession XP_295107.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC339942 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339942, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339942 BINDING SITE, designated SEQ ID:1575, to the nucleotide sequence of

GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59346] Another function of GAM8297 is therefore inhibition of LOC339942 (Accession XP_295107.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339942.

[59347] LOC339978 (Accession XP_295116.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC339978 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC339978, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339978 BINDING SITE, designated SEQ ID:9814, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59348] Another function of GAM8297 is therefore inhibition of LOC339978 (Accession XP_295116.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339978.

[59349] LOC341333 (Accession XP_296117.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC341333 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC341333, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC341333 BINDING SITE, designated SEQ ID:18471, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59350] Another function of GAM8297 is therefore inhibition of LOC341333 (Accession XP_296117.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC341333.

[59351] LOC341867 (Accession XP_292256.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC341867 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC341867, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC341867 BINDING SITE, designated SEQ ID:17370, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59352] Another function of GAM8297 is therefore inhibition of LOC341867 (Accession XP_292256.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC341867.

[59353] LOC342490 (Accession XP_296905.2) is another GAM8297 target gene, herein designated TARGET GENE. LOC342490 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC342490, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC342490 BINDING SITE, designated SEQ ID:5255, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59354] Another function of GAM8297 is therefore inhibition of LOC342490 (Accession XP_296905.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC342490.

[59355] LOC342663 (Accession XP_297028.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC342663 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC342663, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC342663 BINDING SITE, designated SEQ ID:7400, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59356] Another function of GAM8297 is therefore inhibition of LOC342663 (Accession XP_297028.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC342663.

[59357] LOC343141 (Accession XP_291421.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC343141 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC343141, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC343141 BINDING SITE, designated SEQ ID:3845, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59358] Another function of GAM8297 is therefore inhibition of LOC343141 (Accession XP_291421.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC343141.

[59359] LOC343532 (Accession XP_291629.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC343532 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC343532, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC343532 BINDING SITE, designated SEQ ID:7356, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59360] Another function of GAM8297 is therefore inhibition of

LOC343532 (Accession XP_291629.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC343532.

[59361] LOC345422 (Accession XP_298768.2) is another GAM8297 target gene, herein designated TARGET GENE. LOC345422 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC345422, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC345422 BINDING SITE, designated SEQ ID:19581, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59362] Another function of GAM8297 is therefore inhibition of LOC345422 (Accession XP_298768.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC345422.

[59363] LOC346351 (Accession XP_299473.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC346351 BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by LOC346351, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC346351 BINDING SITE, designated SEQ ID:13991, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59364] Another function of GAM8297 is therefore inhibition of LOC346351 (Accession XP_299473.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC346351.

[59365] LOC346430 (Accession XP_299501.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC346430 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC346430, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC346430 BINDING SITE, designated SEQ ID:2854, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also design-

nated SEQ ID:367.

[59366] Another function of GAM8297 is therefore inhibition of LOC346430 (Accession XP_299501.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC346430.

[59367] LOC348155 (Accession XP_211219.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC348155 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC348155, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348155 BINDING SITE, designated SEQ ID:2548, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59368] Another function of GAM8297 is therefore inhibition of LOC348155 (Accession XP_211219.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348155.

[59369] LOC348525 (Accession XP_300778.1) is another

GAM8297 target gene, herein designated TARGET GENE. LOC348525 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC348525, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348525 BINDING SITE, designated SEQ ID:11960, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59370] Another function of GAM8297 is therefore inhibition of LOC348525 (Accession XP_300778.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348525.

[59371] LOC348600 (Accession XP_300790.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC348600 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC348600, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348600 BINDING SITE, design-

nated SEQ ID:10547, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59372] Another function of GAM8297 is therefore inhibition of LOC348600 (Accession XP_300790.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348600.

[59373] LOC349079 (Accession XP_302954.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC349079 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC349079, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349079 BINDING SITE, designated SEQ ID:17698, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59374] Another function of GAM8297 is therefore inhibition of LOC349079 (Accession XP_302954.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC349079.

[59375] LOC349213 (Accession XP_303002.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC349213 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC349213, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349213 BINDING SITE, designated SEQ ID:9993, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59376] Another function of GAM8297 is therefore inhibition of LOC349213 (Accession XP_303002.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349213.

[59377] LOC349262 (Accession XP_303011.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC349262 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC349262, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349262 BINDING SITE, designated SEQ ID:14405, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59378] Another function of GAM8297 is therefore inhibition of LOC349262 (Accession XP_303011.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349262.

[59379] LOC349269 (Accession XP_303012.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC349269 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC349269, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349269 BINDING SITE, designated SEQ ID:14405, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59380] Another function of GAM8297 is therefore inhibition of LOC349269 (Accession XP_303012.1) . Accordingly, utili-

ties of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349269.

[59381] LOC349288 (Accession XP_300476.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC349288 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC349288, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349288 BINDING SITE, designated SEQ ID:14140, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59382] Another function of GAM8297 is therefore inhibition of LOC349288 (Accession XP_300476.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349288.

[59383] LOC349291 (Accession XP_303017.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC349291 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by

LOC349291, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349291 BINDING SITE, designated SEQ ID:14405, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59384] Another function of GAM8297 is therefore inhibition of LOC349291 (Accession XP_303017.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349291.

[59385] LOC349408 (Accession XP_303044.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC349408 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC349408, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349408 BINDING SITE, designated SEQ ID:2271, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59386] Another function of GAM8297 is therefore inhibition of LOC349408 (Accession XP_303044.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349408.

[59387] LOC350598 (Accession XP_304238.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC350598 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC350598, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC350598 BINDING SITE, designated SEQ ID:3074, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59388] Another function of GAM8297 is therefore inhibition of LOC350598 (Accession XP_304238.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC350598.

[59389] LOC51063 (Accession NP_057000.2) is another GAM8297 target gene, herein designated TARGET GENE. LOC51063

BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC51063, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC51063 BINDING SITE, designated SEQ ID:17350, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59390] Another function of GAM8297 is therefore inhibition of LOC51063 (Accession NP_057000.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC51063.

[59391] LOC90768 (Accession NP_849160.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC90768 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by LOC90768, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC90768 BINDING SITE, designated SEQ ID:4499, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also design-

nated SEQ ID:367.

[59392] Another function of GAM8297 is therefore inhibition of LOC90768 (Accession NP_849160.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC90768.

[59393] LOC92606 (Accession XP_046097.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC92606 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC92606, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC92606 BINDING SITE, designated SEQ ID:1231, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59394] Another function of GAM8297 is therefore inhibition of LOC92606 (Accession XP_046097.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC92606.

[59395] LOC93082 (Accession NP_612406.1) is another GAM8297 target gene, herein designated TARGET GENE. LOC93082

BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC93082, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC93082 BINDING SITE, designated SEQ ID:16872, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59396] Another function of GAM8297 is therefore inhibition of LOC93082 (Accession NP_612406.1). Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC93082.

[59397] LYRIC (Accession NP_848927.1) is another GAM8297 target gene, herein designated TARGET GENE. LYRIC BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by LYRIC, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LYRIC BINDING SITE, designated SEQ ID:7749, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59398] Another function of GAM8297 is therefore inhibition of LYRIC (Accession NP_848927.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LYRIC.

[59399] LYRIC (Accession XP_043070.5) is another GAM8297 target gene, herein designated TARGET GENE. LYRIC BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by LYRIC, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LYRIC BINDING SITE, designated SEQ ID:7749, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59400] Another function of GAM8297 is therefore inhibition of LYRIC (Accession XP_043070.5) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LYRIC.

[59401] Mad, mothers against decapentaplegic homolog 7 (drosophila) (MADH7, Accession NP_005895.1) is another GAM8297 target gene, herein designated TARGET GENE. MADH7 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MADH7, cor-

responding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MADH7 BINDING SITE, designated SEQ ID:7744, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59402] Another function of GAM8297 is therefore inhibition of Mad, mothers against decapentaplegic homolog 7 (drosophila) (MADH7, Accession NP_005895.1), a gene which may affect transcription in response to TGF- β superfamily signaling pathways, inhibits BMP/Smad1 (MADH1) signaling and therefore may be associated with Scleroderma. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of Scleroderma, and of other diseases and clinical conditions associated with MADH7.

[59403] The function of MADH7 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM354.1. Mitogen-activated protein kinase kinase 3 (MAP2K3, Accession NP_002747.2) is another GAM8297 target gene, herein designated TARGET GENE. MAP2K3 BINDING SITE is a target binding site found in the 5' un-

translated region of multiple transcripts of mRNA encoded by MAP2K3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MAP2K3 BINDING SITE, designated SEQ ID:7679, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59404] Another function of GAM8297 is therefore inhibition of Mitogen-activated protein kinase kinase 3 (MAP2K3, Accession NP_002747.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MAP2K3.

[59405] Mitogen-activated protein kinase-activated protein kinase 3 (MAPKAPK3, Accession NP_004626.1) is another GAM8297 target gene, herein designated TARGET GENE. MAPKAPK3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MAPKAPK3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MAPKAPK3 BINDING SITE, designated SEQ ID:1041, to the nucleotide sequence of

GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59406] Another function of GAM8297 is therefore inhibition of Mitogen-activated protein kinase-activated protein kinase 3 (MAPKAPK3, Accession NP_004626.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MAPKAPK3.

[59407] Mutated in colorectal cancers (MCC, Accession NP_002378.1) is another GAM8297 target gene, herein designated TARGET GENE. MCC BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MCC, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MCC BINDING SITE, designated SEQ ID:5308, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59408] Another function of GAM8297 is therefore inhibition of Mutated in colorectal cancers (MCC, Accession NP_002378.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clini-

cal conditions associated with MCC.

[59409] MDA5 (Accession NP_071451.2) is another GAM8297 target gene, herein designated TARGET GENE. MDA5 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MDA5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MDA5 BINDING SITE, designated SEQ ID:15518, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59410] Another function of GAM8297 is therefore inhibition of MDA5 (Accession NP_071451.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MDA5.

[59411] Mesoderm development candidate 1 (MESDC1, Accession NP_072088.1) is another GAM8297 target gene, herein designated TARGET GENE. MESDC1 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MESDC1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MESDC1 BIND-

ING SITE, designated SEQ ID:17738, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59412] Another function of GAM8297 is therefore inhibition of Mesoderm development candidate 1 (MESDC1, Accession NP_072088.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MESDC1.

[59413] MGC10646 (Accession NP_116082.1) is another GAM8297 target gene, herein designated TARGET GENE. MGC10646 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC10646, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC10646 BINDING SITE, designated SEQ ID:8894, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59414] Another function of GAM8297 is therefore inhibition of MGC10646 (Accession NP_116082.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC10646.

[59415] MGC10818 (Accession NP_085045.2) is another GAM8297 target gene, herein designated TARGET GENE. MGC10818 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC10818, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC10818 BINDING SITE, designated SEQ ID:2986, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59416] Another function of GAM8297 is therefore inhibition of MGC10818 (Accession NP_085045.2). Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC10818.

[59417] MGC10981 (Accession NP_116043.1) is another GAM8297 target gene, herein designated TARGET GENE. MGC10981 BINDING SITE1 and MGC10981 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by MGC10981, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC10981 BINDING SITE1

and MGC10981 BINDING SITE2, designated SEQ ID:5612 and SEQ ID:1625 respectively, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59418] Another function of GAM8297 is therefore inhibition of MGC10981 (Accession NP_116043.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC10981.

[59419] MGC12904 (Accession NP_112496.1) is another GAM8297 target gene, herein designated TARGET GENE. MGC12904 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MGC12904, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC12904 BINDING SITE, designated SEQ ID:6475, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59420] Another function of GAM8297 is therefore inhibition of MGC12904 (Accession NP_112496.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

MGC12904.

[59421] MGC12966 (Accession NP_116095.1) is another GAM8297 target gene, herein designated TARGET GENE. MGC12966 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC12966, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC12966 BINDING SITE, designated SEQ ID:4628, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59422] Another function of GAM8297 is therefore inhibition of MGC12966 (Accession NP_116095.1). Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC12966.

[59423] MGC13047 (Accession NP_116098.1) is another GAM8297 target gene, herein designated TARGET GENE. MGC13047 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC13047, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

MGC13047 BINDING SITE, designated SEQ ID:13016, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59424] Another function of GAM8297 is therefore inhibition of MGC13047 (Accession NP_116098.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC13047.

[59425] MGC14832 (Accession NP_115715.1) is another GAM8297 target gene, herein designated TARGET GENE. MGC14832 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC14832, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC14832 BINDING SITE, designated SEQ ID:11725, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59426] Another function of GAM8297 is therefore inhibition of MGC14832 (Accession NP_115715.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC14832.

[59427] MGC16291 (Accession NP_116159.2) is another GAM8297 target gene, herein designated TARGET GENE. MGC16291 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC16291, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC16291 BINDING SITE, designated SEQ ID:1591, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59428] Another function of GAM8297 is therefore inhibition of MGC16291 (Accession NP_116159.2). Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC16291.

[59429] MGC16638 (Accession NP_777593.1) is another GAM8297 target gene, herein designated TARGET GENE. MGC16638 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MGC16638, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC16638 BINDING SITE, designated SEQ ID:13782, to

the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59430] Another function of GAM8297 is therefore inhibition of MGC16638 (Accession NP_777593.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC16638.

[59431] MGC20460 (Accession NP_444271.1) is another GAM8297 target gene, herein designated TARGET GENE. MGC20460 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MGC20460, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC20460 BINDING SITE, designated SEQ ID:14116, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59432] Another function of GAM8297 is therefore inhibition of MGC20460 (Accession NP_444271.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC20460.

[59433] MGC2452 (Accession NP_116033.1) is another GAM8297

target gene, herein designated TARGET GENE. MGC2452 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MGC2452, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC2452 BINDING SITE, designated SEQ ID:10266, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59434] Another function of GAM8297 is therefore inhibition of MGC2452 (Accession NP_116033.1). Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC2452.

[59435] MGC26706 (Accession NP_689794.1) is another GAM8297 target gene, herein designated TARGET GENE. MGC26706 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC26706, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC26706 BINDING SITE, designated SEQ ID:5445, to the nucleotide sequence of GAM8297 RNA, herein designated

GAM RNA, also designated SEQ ID:367.

[59436] Another function of GAM8297 is therefore inhibition of MGC26706 (Accession NP_689794.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC26706.

[59437] MGC3067 (Accession NP_077271.1) is another GAM8297 target gene, herein designated TARGET GENE. MGC3067 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC3067, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC3067 BINDING SITE, designated SEQ ID:13227, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59438] Another function of GAM8297 is therefore inhibition of MGC3067 (Accession NP_077271.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC3067.

[59439] MGC33182 (Accession NP_660204.1) is another GAM8297 target gene, herein designated TARGET GENE. MGC33182

BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MGC33182, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC33182 BINDING SITE, designated SEQ ID:17019, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59440] Another function of GAM8297 is therefore inhibition of MGC33182 (Accession NP_660204.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC33182.

[59441] MGC33202 (Accession NP_775811.1) is another GAM8297 target gene, herein designated TARGET GENE. MGC33202 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC33202, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC33202 BINDING SITE, designated SEQ ID:17059, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59442] Another function of GAM8297 is therefore inhibition of MGC33202 (Accession NP_775811.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC33202.

[59443] MGC39696 (Accession NP_689984.1) is another GAM8297 target gene, herein designated TARGET GENE. MGC39696 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by MGC39696, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC39696 BINDING SITE, designated SEQ ID:13115, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59444] Another function of GAM8297 is therefore inhibition of MGC39696 (Accession NP_689984.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC39696.

[59445] MGC40053 (Accession NP_689796.1) is another GAM8297 target gene, herein designated TARGET GENE. MGC40053 BINDING SITE is a target binding site found in the 3` un-

translated region of mRNA encoded by MGC40053, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC40053 BINDING SITE, designated SEQ ID:16179, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59446] Another function of GAM8297 is therefore inhibition of MGC40053 (Accession NP_689796.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC40053.

[59447] MGC45408 (Accession NP_689502.1) is another GAM8297 target gene, herein designated TARGET GENE. MGC45408 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC45408, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC45408 BINDING SITE, designated SEQ ID:2651, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59448] Another function of GAM8297 is therefore inhibition of

MGC45408 (Accession NP_689502.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC45408.

[59449] MGC45840 (Accession NP_775855.1) is another GAM8297 target gene, herein designated TARGET GENE. MGC45840 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC45840, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC45840 BINDING SITE, designated SEQ ID:19671, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59450] Another function of GAM8297 is therefore inhibition of MGC45840 (Accession NP_775855.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC45840.

[59451] MGC4737 (Accession NP_113654.1) is another GAM8297 target gene, herein designated TARGET GENE. MGC4737 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MGC4737, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC4737 BINDING SITE, designated SEQ ID:4951, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59452] Another function of GAM8297 is therefore inhibition of MGC4737 (Accession NP_113654.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC4737.

[59453] MGC4796 (Accession NP_114406.1) is another GAM8297 target gene, herein designated TARGET GENE. MGC4796 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by MGC4796, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC4796 BINDING SITE, designated SEQ ID:4380, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59454] Another function of GAM8297 is therefore inhibition of

MGC4796 (Accession NP_114406.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC4796.

[59455] MGC5391 (Accession NP_116129.2) is another GAM8297 target gene, herein designated TARGET GENE. MGC5391 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC5391, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC5391 BINDING SITE, designated SEQ ID:13373, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59456] Another function of GAM8297 is therefore inhibition of MGC5391 (Accession NP_116129.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC5391.

[59457] MGC5508 (Accession NP_076997.1) is another GAM8297 target gene, herein designated TARGET GENE. MGC5508 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC5508, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC5508 BINDING SITE, designated SEQ ID:4031, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59458] Another function of GAM8297 is therefore inhibition of MGC5508 (Accession NP_076997.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC5508.

[59459] MIRO-2 (Accession NP_620124.1) is another GAM8297 target gene, herein designated TARGET GENE. MIRO-2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MIRO-2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MIRO-2 BINDING SITE, designated SEQ ID:10083, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59460] Another function of GAM8297 is therefore inhibition of MIRO-2 (Accession NP_620124.1) . Accordingly, utilities

of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MIRO-2.

[59461] Megalencephalic leukoencephalopathy with subcortical cysts 1 (MLC1, Accession NP_631941.1) is another GAM8297 target gene, herein designated TARGET GENE. MLC1 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by MLC1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MLC1 BINDING SITE, designated SEQ ID:1467, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59462] Another function of GAM8297 is therefore inhibition of Megalencephalic leukoencephalopathy with subcortical cysts 1 (MLC1, Accession NP_631941.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MLC1.

[59463] Megalencephalic leukoencephalopathy with subcortical cysts 1 (MLC1, Accession NP_055981.1) is another

GAM8297 target gene, herein designated TARGET GENE. MLC1 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by MLC1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MLC1 BINDING SITE, designated SEQ ID:1467, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59464] Another function of GAM8297 is therefore inhibition of Megalencephalic leukoencephalopathy with subcortical cysts 1 (MLC1, Accession NP_055981.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MLC1.

[59465] Mitochondrial ribosomal protein s27 (MRPS27, Accession NP_055899.1) is another GAM8297 target gene, herein designated TARGET GENE. MRPS27 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MRPS27, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the comple-

mentarity of the nucleotide sequences of MRPS27 BINDING SITE, designated SEQ ID:15026, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59466] Another function of GAM8297 is therefore inhibition of Mitochondrial ribosomal protein s27 (MRPS27, Accession NP_055899.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MRPS27.

[59467] MSTP028 (Accession NP_114160.1) is another GAM8297 target gene, herein designated TARGET GENE. MSTP028 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MSTP028, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MSTP028 BINDING SITE, designated SEQ ID:2725, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59468] Another function of GAM8297 is therefore inhibition of MSTP028 (Accession NP_114160.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

MSTP028.

[59469] Methylene tetrahydrofolate dehydrogenase (nad⁺ dependent), methenyltetrahydrofolate cyclohydrolase (MTHFD2, Accession NP_006627.1) is another GAM8297 target gene, herein designated TARGET GENE. MTHFD2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MTHFD2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MTHFD2 BINDING SITE, designated SEQ ID:11949, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59470] Another function of GAM8297 is therefore inhibition of Methylene tetrahydrofolate dehydrogenase (nad⁺ dependent), methenyltetrahydrofolate cyclohydrolase (MTHFD2, Accession NP_006627.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MTHFD2.

[59471] Mucin 6, gastric (MUC6, Accession XP_290540.1) is another GAM8297 target gene, herein designated TARGET GENE. MUC6 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MUC6,

corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MUC6 BINDING SITE, designated SEQ ID:5705, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59472] Another function of GAM8297 is therefore inhibition of Mucin 6, gastric (MUC6, Accession XP_290540.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MUC6.

[59473] Myosin id (MYO1D, Accession XP_050041.4) is another GAM8297 target gene, herein designated TARGET GENE. MYO1D BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MYO1D, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MYO1D BINDING SITE, designated SEQ ID:12931, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59474] Another function of GAM8297 is therefore inhibition of Myosin id (MYO1D, Accession XP_050041.4), a gene which

is an unconventional myosin. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MYO1D.

[59475] The function of MYO1D and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM227.1. Myosin iia (MYO3A, Accession NP_059129.2) is another GAM8297 target gene, herein designated TARGET GENE. MYO3A BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MYO3A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MYO3A BINDING SITE, designated SEQ ID:9274, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59476] Another function of GAM8297 is therefore inhibition of Myosin iia (MYO3A, Accession NP_059129.2), a gene which may have a role in photoreceptor function and/or maintenance. and therefore is associated with Deafness, autosomal recessive 30. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of Deafness,

autosomal recessive 30., and of other diseases and clinical conditions associated with MYO3A.

[59477] The function of MYO3A and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM1195.1. Myozenin 2 (MYOZ2, Accession NP_057683.1) is another GAM8297 target gene, herein designated TARGET GENE. MYOZ2 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MYOZ2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MYOZ2 BINDING SITE, designated SEQ ID:7556, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59478] Another function of GAM8297 is therefore inhibition of Myozenin 2 (MYOZ2, Accession NP_057683.1). Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MYOZ2.

[59479] Neuron navigator 3 (NAV3, Accession NP_055718.2) is another GAM8297 target gene, herein designated TARGET

GENE. NAV3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by NAV3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NAV3 BINDING SITE, designated SEQ ID:5758, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59480] Another function of GAM8297 is therefore inhibition of Neuron navigator 3 (NAV3, Accession NP_055718.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NAV3.

[59481] Norrie disease (pseudoglioma) (NDP, Accession NP_000257.1) is another GAM8297 target gene, herein designated TARGET GENE. NDP BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by NDP, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NDP BINDING SITE, designated SEQ ID:17354, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ

ID:367.

[59482] Another function of GAM8297 is therefore inhibition of Norrie disease (pseudoglioma) (NDP, Accession NP_000257.1), a gene which may be involved in a pathway that regulates neural cell differentiation and proliferation and therefore is associated with Norrie disease (nd), familial exudative vitreoretinopathy . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of Norrie disease (nd), familial exudative vitreoretinopathy ., and of other diseases and clinical conditions associated with NDP.

[59483] The function of NDP and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM206.1.Neuropilin (nrp) and tolloid (tll)-like 1 (NETO1, Accession NP_620552.1) is another GAM8297 target gene, herein designated TARGET GENE. NETO1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by NETO1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NETO1 BINDING SITE, designated

SEQ ID:3758, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59484] Another function of GAM8297 is therefore inhibition of Neuropilin (nrp) and tolloid (tll)-like 1 (NETO1, Accession NP_620552.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NETO1.

[59485] Nuclear factor of kappa light polypeptide gene enhancer in b-cells inhibitor-like 1 (NFKBIL1, Accession NP_004998.2) is another GAM8297 target gene, herein designated TARGET GENE. NFKBIL1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by NFKBIL1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NFKBIL1 BINDING SITE, designated SEQ ID:7331, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59486] Another function of GAM8297 is therefore inhibition of Nuclear factor of kappa light polypeptide gene enhancer in b-cells inhibitor-like 1 (NFKBIL1, Accession

NP_004998.2), a gene which is similar to the I kappa B family of proteins and contains ankyrin repeats. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NFKBIL1.

[59487] The function of NFKBIL1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM500.1. Natural killer-tumor recognition sequence (NKTR, Accession NP_005376.2) is another GAM8297 target gene, herein designated TARGET GENE. NKTR BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by NKTR, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NKTR BINDING SITE, designated SEQ ID:4907, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59488] Another function of GAM8297 is therefore inhibition of Natural killer-tumor recognition sequence (NKTR, Accession NP_005376.2), a gene which is involved in the function of nk cells. Accordingly, utilities of GAM8297 include

diagnosis, prevention and treatment of diseases and clinical conditions associated with NKTR.

[59489] The function of NKTR and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM467.2.NLI-IF (Accession NP_067021.1) is another GAM8297 target gene, herein designated TARGET GENE. NLI-IF BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by NLI-IF, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NLI-IF BINDING SITE, designated SEQ ID:15666, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59490] Another function of GAM8297 is therefore inhibition of NLI-IF (Accession NP_067021.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NLI-IF.

[59491] Niemann-pick disease, type c2 (NPC2, Accession NP_006423.1) is another GAM8297 target gene, herein designated TARGET GENE. NPC2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA

encoded by NPC2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NPC2 BINDING SITE, designated SEQ ID:14591, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59492] Another function of GAM8297 is therefore inhibition of Niemann–pick disease, type c2 (NPC2, Accession NP_006423.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NPC2.

[59493] NSG–X (Accession NP_055226.1) is another GAM8297 target gene, herein designated TARGET GENE. NSG–X BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by NSG–X, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NSG–X BINDING SITE, designated SEQ ID:2106, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59494] Another function of GAM8297 is therefore inhibition of

NSG-X (Accession NP_055226.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NSG-X.

[59495] Neurexophilin 3 (NXPH3, Accession NP_009156.1) is another GAM8297 target gene, herein designated TARGET GENE. NXPH3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by NXPH3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NXPH3 BINDING SITE, designated SEQ ID:12898, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59496] Another function of GAM8297 is therefore inhibition of Neurexophilin 3 (NXPH3, Accession NP_009156.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NXPH3.

[59497] NYD-SP11 (Accession NP_114157.2) is another GAM8297 target gene, herein designated TARGET GENE. NYD-SP11 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by NYD-SP11, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NYD-SP11 BINDING SITE, designated SEQ ID:9259, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59498] Another function of GAM8297 is therefore inhibition of NYD-SP11 (Accession NP_114157.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NYD-SP11.

[59499] 2'-5'-oligoadenylate synthetase 3, 100kda (OAS3, Accession NP_006178.1) is another GAM8297 target gene, herein designated TARGET GENE. OAS3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by OAS3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of OAS3 BINDING SITE, designated SEQ ID:3720, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59500] Another function of GAM8297 is therefore inhibition of

2'-5'-oligoadenylate synthetase 3, 100kda (OAS3, Accession NP_006178.1), a gene which may play a role in mediating resistance to virus infection, control of cell growth, differentiation, and apoptosis. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with OAS3.

[59501] The function of OAS3 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM63.1. Purinergic receptor p2x, ligand-gated ion channel, 1 (P2RX1, Accession NP_002549.1) is another GAM8297 target gene, herein designated TARGET GENE. P2RX1 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by P2RX1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of P2RX1 BINDING SITE, designated SEQ ID:2491, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59502] Another function of GAM8297 is therefore inhibition of Purinergic receptor p2x, ligand-gated ion channel, 1 (P2RX1, Accession NP_002549.1). Accordingly, utilities of

GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with P2RX1.

[59503] Protocadherin 11 x-linked (PCDH11X, Accession NP_116751.1) is another GAM8297 target gene, herein designated TARGET GENE. PCDH11X BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PCDH11X, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PCDH11X BINDING SITE, designated SEQ ID:11504, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59504] Another function of GAM8297 is therefore inhibition of Protocadherin 11 x-linked (PCDH11X, Accession NP_116751.1), a gene which is thought to play a fundamental role in cell-cell recognition essential for the segmental development and function of the central nervous system. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PCDH11X.

[59505] The function of PCDH11X and its association with various diseases and clinical conditions, has been established by

previous studies, as described hereinabove with reference to GAM347.2. Protocadherin 11 x-linked (PCDH11X, Accession NP_116750.1) is another GAM8297 target gene, herein designated TARGET GENE. PCDH11X BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PCDH11X, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PCDH11X BINDING SITE, designated SEQ ID:11504, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59506] Another function of GAM8297 is therefore inhibition of Protocadherin 11 x-linked (PCDH11X, Accession NP_116750.1), a gene which is thought to play a fundamental role in cell-cell recognition essential for the segmental development and function of the central nervous system. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PCDH11X.

[59507] The function of PCDH11X and its association with various diseases and clinical conditions, has been established by

previous studies, as described hereinabove with reference to GAM347.2. Protocadherin 11 γ -linked (PCDH11Y, Accession NP_116755.1) is another GAM8297 target gene, herein designated TARGET GENE. PCDH11Y BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PCDH11Y, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PCDH11Y BINDING SITE, designated SEQ ID:11504, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59508] Another function of GAM8297 is therefore inhibition of Protocadherin 11 γ -linked (PCDH11Y, Accession NP_116755.1). Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PCDH11Y.

[59509] Protocadherin gamma subfamily a, 1 (PCDHGA1, Accession NP_061735.1) is another GAM8297 target gene, herein designated TARGET GENE. PCDHGA1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PCDHGA1, corresponding to a

target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PCDHGA1 BINDING SITE, designated SEQ ID:3215, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59510] Another function of GAM8297 is therefore inhibition of Protocadherin gamma subfamily a, 1 (PCDHGA1, Accession NP_061735.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PCDHGA1.

[59511] Protocadherin gamma subfamily a, 10 (PCDHGA10, Accession NP_061736.1) is another GAM8297 target gene, herein designated TARGET GENE. PCDHGA10 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PCDHGA10, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PCDHGA10 BINDING SITE, designated SEQ ID:3215, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59512] Another function of GAM8297 is therefore inhibition of

Protocadherin gamma subfamily a, 10 (PCDHGA10, Accession NP_061736.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PCDHGA10.

[59513] Protocadherin gamma subfamily a, 11 (PCDHGA11, Accession NP_061737.1) is another GAM8297 target gene, herein designated TARGET GENE. PCDHGA11 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PCDHGA11, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PCDHGA11 BINDING SITE, designated SEQ ID:3215, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59514] Another function of GAM8297 is therefore inhibition of Protocadherin gamma subfamily a, 11 (PCDHGA11, Accession NP_061737.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PCDHGA11.

[59515] Protocadherin gamma subfamily a, 11 (PCDHGA11, Accession NP_114481.1) is another GAM8297 target gene,

herein designated TARGET GENE. PCDHGA11 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PCDHGA11, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PCDHGA11 BINDING SITE, designated SEQ ID:3215, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59516] Another function of GAM8297 is therefore inhibition of Protocadherin gamma subfamily a, 11 (PCDHGA11, Accession NP_114481.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PCDHGA11.

[59517] Protocadherin gamma subfamily a, 12 (PCDHGA12, Accession NP_003726.1) is another GAM8297 target gene, herein designated TARGET GENE. PCDHGA12 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PCDHGA12, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of PCDHGA12 BINDING SITE, designated SEQ ID:3215, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59518] Another function of GAM8297 is therefore inhibition of Protocadherin gamma subfamily a, 12 (PCDHGA12, Accession NP_003726.1), a gene which potential calcium- dependent cell- adhesion protein. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PCDHGA12.

[59519] The function of PCDHGA12 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM607.2. Protocadherin gamma subfamily a, 2 (PCDHGA2, Accession NP_061738.1) is another GAM8297 target gene, herein designated TARGET GENE. PCDHGA2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PCDHGA2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PCDHGA2 BINDING SITE, designated

SEQ ID:3215, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59520] Another function of GAM8297 is therefore inhibition of Protocadherin gamma subfamily a, 2 (PCDHGA2, Accession NP_061738.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PCDHGA2.

[59521] Protocadherin gamma subfamily a, 3 (PCDHGA3, Accession NP_061739.2) is another GAM8297 target gene, herein designated TARGET GENE. PCDHGA3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PCDHGA3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PCDHGA3 BINDING SITE, designated SEQ ID:3215, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59522] Another function of GAM8297 is therefore inhibition of Protocadherin gamma subfamily a, 3 (PCDHGA3, Accession NP_061739.2), a gene which is a potential calcium-dependent cell-adhesion protein. Accordingly, utilities of

GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PCDHGA3.

[59523] The function of PCDHGA3 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM607.2. Protocadherin gamma subfamily a, 4 (PCDHGA4, Accession NP_061740.1) is another GAM8297 target gene, herein designated TARGET GENE. PCDHGA4 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PCDHGA4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PCDHGA4 BINDING SITE, designated SEQ ID:3215, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59524] Another function of GAM8297 is therefore inhibition of Protocadherin gamma subfamily a, 4 (PCDHGA4, Accession NP_061740.1). Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PCDHGA4.

[59525] Protocadherin gamma subfamily a, 5 (PCDHGA5, Acces-

sion NP_061741.1) is another GAM8297 target gene, herein designated TARGET GENE. PCDHGA5 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PCDHGA5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PCDHGA5 BINDING SITE, designated SEQ ID:3215, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59526] Another function of GAM8297 is therefore inhibition of Protocadherin gamma subfamily a, 5 (PCDHGA5, Accession NP_061741.1), a gene which is a potential calcium-dependent cell-adhesion protein. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PCDHGA5.

[59527] The function of PCDHGA5 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM607.2. Protocadherin gamma subfamily a, 6 (PCDHGA6, Accession NP_061742.1) is another GAM8297 target gene, herein designated TARGET GENE. PCDHGA6 BINDING SITE is a target binding site found in the 3' un-

translated region of mRNA encoded by PCDHGA6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PCDHGA6 BINDING SITE, designated SEQ ID:3215, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59528] Another function of GAM8297 is therefore inhibition of Protocadherin gamma subfamily a, 6 (PCDHGA6, Accession NP_061742.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PCDHGA6.

[59529] Protocadherin gamma subfamily a, 7 (PCDHGA7, Accession NP_061743.1) is another GAM8297 target gene, herein designated TARGET GENE. PCDHGA7 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PCDHGA7, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PCDHGA7 BINDING SITE, designated SEQ ID:3215, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ

ID:367.

[59530] Another function of GAM8297 is therefore inhibition of Protocadherin gamma subfamily a, 7 (PCDHGA7, Accession NP_061743.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PCDHGA7.

[59531] Protocadherin gamma subfamily a, 8 (PCDHGA8, Accession NP_114477.1) is another GAM8297 target gene, herein designated TARGET GENE. PCDHGA8 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PCDHGA8, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PCDHGA8 BINDING SITE, designated SEQ ID:3215, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59532] Another function of GAM8297 is therefore inhibition of Protocadherin gamma subfamily a, 8 (PCDHGA8, Accession NP_114477.1), a gene which is a potential calcium-dependent cell- adhesion protein. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of

diseases and clinical conditions associated with PCDHGA8.

[59533] The function of PCDHGA8 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM607.2. Protocadherin gamma subfamily a, 9 (PCDHGA9, Accession NP_061744.1) is another GAM8297 target gene, herein designated TARGET GENE. PCDHGA9 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PCDHGA9, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PCDHGA9 BINDING SITE, designated SEQ ID:3215, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59534] Another function of GAM8297 is therefore inhibition of Protocadherin gamma subfamily a, 9 (PCDHGA9, Accession NP_061744.1). Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PCDHGA9.

[59535] Protocadherin gamma subfamily b, 1 (PCDHGB1, Accession NP_061745.1) is another GAM8297 target gene, herein designated TARGET GENE. PCDHGB1 BINDING SITE

is a target binding site found in the 3' untranslated region of mRNA encoded by PCDHGB1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PCDHGB1 BINDING SITE, designated SEQ ID:3215, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59536] Another function of GAM8297 is therefore inhibition of Protocadherin gamma subfamily b, 1 (PCDHGB1, Accession NP_061745.1). Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PCDHGB1.

[59537] Protocadherin gamma subfamily b, 2 (PCDHGB2, Accession NP_061746.1) is another GAM8297 target gene, herein designated TARGET GENE. PCDHGB2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PCDHGB2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PCDHGB2 BINDING SITE, designated SEQ ID:3215, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA,

also designated SEQ ID:367.

[59538] Another function of GAM8297 is therefore inhibition of Protocadherin gamma subfamily b, 2 (PCDHGB2, Accession NP_061746.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PCDHGB2.

[59539] Protocadherin gamma subfamily b, 3 (PCDHGB3, Accession NP_061747.1) is another GAM8297 target gene, herein designated TARGET GENE. PCDHGB3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PCDHGB3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PCDHGB3 BINDING SITE, designated SEQ ID:3215, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59540] Another function of GAM8297 is therefore inhibition of Protocadherin gamma subfamily b, 3 (PCDHGB3, Accession NP_061747.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PCDHGB3.

[59541] Protocadherin gamma subfamily b, 4 (PCDHGB4, Acces-

sion NP_003727.1) is another GAM8297 target gene, herein designated TARGET GENE. PCDHGB4 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PCDHGB4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PCDHGB4 BINDING SITE, designated SEQ ID:3215, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59542] Another function of GAM8297 is therefore inhibition of Protocadherin gamma subfamily b, 4 (PCDHGB4, Accession NP_003727.1), a gene which is a potential calcium-dependent cell-adhesion protein. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PCDHGB4.

[59543] The function of PCDHGB4 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM607.2. Protocadherin gamma subfamily b, 5 (PCDHGB5, Accession NP_061748.1) is another GAM8297 target gene, herein designated TARGET GENE. PCDHGB5 BINDING SITE is a target binding site found in the 3' un-

translated region of mRNA encoded by PCDHGB5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PCDHGB5 BINDING SITE, designated SEQ ID:3215, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59544] Another function of GAM8297 is therefore inhibition of Protocadherin gamma subfamily b, 5 (PCDHGB5, Accession NP_061748.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PCDHGB5.

[59545] Protocadherin gamma subfamily b, 6 (PCDHGB6, Accession NP_061749.1) is another GAM8297 target gene, herein designated TARGET GENE. PCDHGB6 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PCDHGB6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PCDHGB6 BINDING SITE, designated SEQ ID:3215, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59546] Another function of GAM8297 is therefore inhibition of Protocadherin gamma subfamily b, 6 (PCDHGB6, Accession NP_061749.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PCDHGB6.

[59547] Protocadherin gamma subfamily b, 7 (PCDHGB7, Accession NP_061750.1) is another GAM8297 target gene, herein designated TARGET GENE. PCDHGB7 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PCDHGB7, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PCDHGB7 BINDING SITE, designated SEQ ID:3215, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59548] Another function of GAM8297 is therefore inhibition of Protocadherin gamma subfamily b, 7 (PCDHGB7, Accession NP_061750.1), a gene which is a potential calcium-dependent cell- adhesion protein. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PCDHGB7.

[59549] The function of PCDHGB7 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM607.2. Protocadherin gamma subfamily c, 3 (PCDHGC3, Accession NP_115779.1) is another GAM8297 target gene, herein designated TARGET GENE. PCDHGC3 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PCDHGC3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PCDHGC3 BINDING SITE, designated SEQ ID:3215, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59550] Another function of GAM8297 is therefore inhibition of Protocadherin gamma subfamily c, 3 (PCDHGC3, Accession NP_115779.1), a gene which is a potential calcium-dependent cell-adhesion protein. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PCDHGC3.

[59551] The function of PCDHGC3 and its association with various diseases and clinical conditions, has been established by

previous studies, as described hereinabove with reference to GAM607.2.Protocadherin gamma subfamily c, 3 (PCDHGC3, Accession NP_002579.2) is another GAM8297 target gene, herein designated TARGET GENE. PCDHGC3 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PCDHGC3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PCDHGC3 BINDING SITE, designated SEQ ID:3215, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59552] Another function of GAM8297 is therefore inhibition of Protocadherin gamma subfamily c, 3 (PCDHGC3, Accession NP_002579.2), a gene which is a potential calcium-dependent cell-adhesion protein. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PCDHGC3.

[59553] The function of PCDHGC3 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM607.2.Protocadherin gamma subfamily c, 4

(PCDHGC4, Accession NP_061751.1) is another GAM8297 target gene, herein designated TARGET GENE. PCDHGC4 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PCDHGC4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PCDHGC4 BINDING SITE, designated SEQ ID:3215, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59554] Another function of GAM8297 is therefore inhibition of Protocadherin gamma subfamily c, 4 (PCDHGC4, Accession NP_061751.1), a gene which is a potential calcium-dependent cell-adhesion protein. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PCDHGC4.

[59555] The function of PCDHGC4 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM607.2. Protocadherin gamma subfamily c, 5 (PCDHGC5, Accession NP_061752.1) is another GAM8297 target gene, herein designated TARGET GENE. PCDHGC5 BINDING SITE is a target binding site found in the 3' un-

translated region of mRNA encoded by PCDHGC5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PCDHGC5 BINDING SITE, designated SEQ ID:3215, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59556] Another function of GAM8297 is therefore inhibition of Protocadherin gamma subfamily c, 5 (PCDHGC5, Accession NP_061752.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PCDHGC5.

[59557] Platelet-derived growth factor receptor, beta polypeptide (PDGFRB, Accession NP_002600.1) is another GAM8297 target gene, herein designated TARGET GENE. PDGFRB BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PDGFRB, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PDGFRB BINDING SITE, designated SEQ ID:10084, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59558] Another function of GAM8297 is therefore inhibition of Platelet-derived growth factor receptor, beta polypeptide (PDGFRB, Accession NP_002600.1), a gene which Platelet-derived growth factor receptor beta chain; tyrosine kinase receptor. and therefore may be associated with Chronic myeloproliferative diseases. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of Chronic myeloproliferative diseases, and of other diseases and clinical conditions associated with PDGFRB.

[59559] The function of PDGFRB and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM579.1. Pelota homolog (drosophila) (PELO, Accession NP_057030.2) is another GAM8297 target gene, herein designated TARGET GENE. PELO BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by PELO, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PELO BINDING SITE, designated SEQ ID:2948, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59560] Another function of GAM8297 is therefore inhibition of Pelota homolog (drosophila) (PELO, Accession NP_057030.2), a gene which may has a role in spermatogenesis, mitotic division, and patterning. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PELO.

[59561] The function of PELO and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM702.1. Prohibitin (PHB, Accession NP_002625.1) is another GAM8297 target gene, herein designated TARGET GENE. PHB BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PHB, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PHB BINDING SITE, designated SEQ ID:9136, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59562] Another function of GAM8297 is therefore inhibition of Prohibitin (PHB, Accession NP_002625.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and

treatment of diseases and clinical conditions associated with PHB.

[59563] Polymeric immunoglobulin receptor (PIGR, Accession NP_002635.2) is another GAM8297 target gene, herein designated TARGET GENE. PIGR BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by PIGR, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PIGR BINDING SITE, designated SEQ ID:15327, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59564] Another function of GAM8297 is therefore inhibition of Polymeric immunoglobulin receptor (PIGR, Accession NP_002635.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PIGR.

[59565] Pim-2 oncogene (PIM2, Accession NP_006866.1) is another GAM8297 target gene, herein designated TARGET GENE. PIM2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PIM2, corresponding to a target binding site such as BINDING

SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PIM2 BINDING SITE, designated SEQ ID:12815, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59566] Another function of GAM8297 is therefore inhibition of Pim-2 oncogene (PIM2, Accession NP_006866.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PIM2.

[59567] Pleiomorphic adenoma gene 1 (PLAG1, Accession NP_002646.1) is another GAM8297 target gene, herein designated TARGET GENE. PLAG1 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by PLAG1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PLAG1 BINDING SITE, designated SEQ ID:12375, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59568] Another function of GAM8297 is therefore inhibition of Pleiomorphic adenoma gene 1 (PLAG1, Accession

NP_002646.1), a gene which contains a zinc finger domain. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PLAG1.

[59569] The function of PLAG1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM47.1.PP2CE (Accession NP_640338.1) is another GAM8297 target gene, herein designated TARGET GENE. PP2CE BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by PP2CE, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PP2CE BINDING SITE, designated SEQ ID:6865, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59570] Another function of GAM8297 is therefore inhibition of PP2CE (Accession NP_640338.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PP2CE.

[59571] Phosphatidic acid phosphatase type 2b (PPAP2B, Accession NP_803133.1) is another GAM8297 target gene,

herein designated TARGET GENE. PPAP2B BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PPAP2B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PPAP2B BINDING SITE, designated SEQ ID:4950, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59572] Another function of GAM8297 is therefore inhibition of Phosphatidic acid phosphatase type 2b (PPAP2B, Accession NP_803133.1). Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PPAP2B.

[59573] Phosphatidic acid phosphatase type 2b (PPAP2B, Accession NP_003704.3) is another GAM8297 target gene, herein designated TARGET GENE. PPAP2B BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PPAP2B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PPAP2B BINDING SITE, designated SEQ ID:4950, to the

nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59574] Another function of GAM8297 is therefore inhibition of Phosphatidic acid phosphatase type 2b (PPAP2B, Accession NP_003704.3) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PPAP2B.

[59575] Peptidylprolyl isomerase (cyclophilin)-like 3 (PPIL3, Accession NP_572028.1) is another GAM8297 target gene, herein designated TARGET GENE. PPIL3 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by PPIL3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PPIL3 BINDING SITE, designated SEQ ID:2401, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59576] Another function of GAM8297 is therefore inhibition of Peptidylprolyl isomerase (cyclophilin)-like 3 (PPIL3, Accession NP_572028.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PPIL3.

[59577] Peptidylprolyl isomerase (cyclophilin)-like 3 (PPIL3, Accession NP_115861.1) is another GAM8297 target gene, herein designated TARGET GENE. PPIL3 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by PPIL3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PPIL3 BINDING SITE, designated SEQ ID:2401, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59578] Another function of GAM8297 is therefore inhibition of Peptidylprolyl isomerase (cyclophilin)-like 3 (PPIL3, Accession NP_115861.1). Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PPIL3.

[59579] Peptidylprolyl isomerase (cyclophilin)-like 3 (PPIL3, Accession NP_570981.1) is another GAM8297 target gene, herein designated TARGET GENE. PPIL3 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by PPIL3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of PPIL3 BINDING SITE, designated SEQ ID:2401, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59580] Another function of GAM8297 is therefore inhibition of Peptidylprolyl isomerase (cyclophilin)-like 3 (PPIL3, Accession NP_570981.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PPIL3.

[59581] Protein phosphatase 1f (pp2c domain containing) (PPM1F, Accession NP_055449.1) is another GAM8297 target gene, herein designated TARGET GENE. PPM1F BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PPM1F, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PPM1F BINDING SITE, designated SEQ ID:13090, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59582] Another function of GAM8297 is therefore inhibition of Protein phosphatase 1f (pp2c domain containing) (PPM1F, Accession NP_055449.1) . Accordingly, utilities of

GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PPM1F.

[59583] Pr domain containing 1, with znf domain (PRDM1, Accession NP_001189.1) is another GAM8297 target gene, herein designated TARGET GENE. PRDM1 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by PRDM1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PRDM1 BINDING SITE, designated SEQ ID:6451, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59584] Another function of GAM8297 is therefore inhibition of Pr domain containing 1, with znf domain (PRDM1, Accession NP_001189.1), a gene which may be involved in transcriptional regulation and is critical for commitment to a plasma cell fate. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PRDM1.

[59585] The function of PRDM1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM2205.1.Prion protein 2 (dublet) (PRND, Accession NP_036541.1) is another GAM8297 target gene, herein designated TARGET GENE. PRND BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PRND, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PRND BINDING SITE, designated SEQ ID:937, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59586] Another function of GAM8297 is therefore inhibition of Prion protein 2 (dublet) (PRND, Accession NP_036541.1), a gene which is similar to prion protein PRNP. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PRND.

[59587] The function of PRND and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM116.1.PRO0149 (Accession NP_054836.1) is another GAM8297 target gene, herein designated TARGET GENE. PRO0149 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by

PRO0149, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PRO0149 BINDING SITE, designated SEQ ID:7715, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59588] Another function of GAM8297 is therefore inhibition of PRO0149 (Accession NP_054836.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PRO0149.

[59589] Prostein (Accession NP_149093.1) is another GAM8297 target gene, herein designated TARGET GENE. Prostein BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by Prostein, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of Prostein BINDING SITE, designated SEQ ID:10314, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59590] Another function of GAM8297 is therefore inhibition of

Prostein (Accession NP_149093.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with Prostein.

[59591] Periaxin (PRX, Accession NP_066007.1) is another GAM8297 target gene, herein designated TARGET GENE. PRX BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PRX, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PRX BINDING SITE, designated SEQ ID:13569, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59592] Another function of GAM8297 is therefore inhibition of Periaxin (PRX, Accession NP_066007.1), a gene which seems to be required for maintenance of peripheral nerve myelin sheath. may have a role in axon- glial interactions, possibly by interacting with the cytoplasmic domains of integral membrane proteins such as myelin- associated glycoprotein in the periaxonal regions of the schwann cell plasma membrane. may have a role in the early phases of myelin deposition and therefore is associated with Dejer-

ine- sotta neuropathy, autosomal recessive. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of Dejerine- sotta neuropathy, autosomal recessive, and of other diseases and clinical conditions associated with PRX.

[59593] The function of PRX and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1. Pleckstrin homology, sec7 and coiled/coil domains 1 (cytohesin 1) (PSCD1, Accession NP_059430.1) is another GAM8297 target gene, herein designated TARGET GENE. PSCD1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PSCD1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PSCD1 BINDING SITE, designated SEQ ID:20040, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59594] Another function of GAM8297 is therefore inhibition of Pleckstrin homology, sec7 and coiled/coil domains 1 (cytohesin 1) (PSCD1, Accession NP_059430.1). Accord-

ingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PSCD1.

[59595] Pleckstrin homology, sec7 and coiled/coil domains 1(cytohesin 1) (PSCD1, Accession NP_004753.1) is another GAM8297 target gene, herein designated TARGET GENE. PSCD1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PSCD1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PSCD1 BINDING SITE, designated SEQ ID:20040, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59596] Another function of GAM8297 is therefore inhibition of Pleckstrin homology, sec7 and coiled/coil domains 1(cytohesin 1) (PSCD1, Accession NP_004753.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PSCD1.

[59597] Protein tyrosine phosphatase type iva, member 1 (PTP4A1, Accession NP_003454.1) is another GAM8297 target gene,

herein designated TARGET GENE. PTP4A1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PTP4A1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PTP4A1 BINDING SITE, designated SEQ ID:7509, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59598] Another function of GAM8297 is therefore inhibition of Protein tyrosine phosphatase type iva, member 1 (PTP4A1, Accession NP_003454.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PTP4A1.

[59599] Protein tyrosine phosphatase, receptor type, u (PTPRU, Accession NP_573439.1) is another GAM8297 target gene, herein designated TARGET GENE. PTPRU BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PTPRU, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PTPRU BINDING SITE, designated SEQ ID:3003, to the nu-

cleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59600] Another function of GAM8297 is therefore inhibition of Protein tyrosine phosphatase, receptor type, u (PTPRU, Accession NP_573439.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PTPRU.

[59601] Protein tyrosine phosphatase, receptor type, u (PTPRU, Accession NP_573438.1) is another GAM8297 target gene, herein designated TARGET GENE. PTPRU BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PTPRU, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PTPRU BINDING SITE, designated SEQ ID:3003, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59602] Another function of GAM8297 is therefore inhibition of Protein tyrosine phosphatase, receptor type, u (PTPRU, Accession NP_573438.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PTPRU.

[59603] Protein tyrosine phosphatase, receptor type, u (PTPRU, Accession NP_005695.2) is another GAM8297 target gene, herein designated TARGET GENE. PTPRU BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PTPRU, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PTPRU BINDING SITE, designated SEQ ID:3003, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59604] Another function of GAM8297 is therefore inhibition of Protein tyrosine phosphatase, receptor type, u (PTPRU, Accession NP_005695.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PTPRU.

[59605] PYC1 (Accession NP_690865.1) is another GAM8297 target gene, herein designated TARGET GENE. PYC1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PYC1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PYC1 BINDING

SITE, designated SEQ ID:15258, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59606] Another function of GAM8297 is therefore inhibition of PYC1 (Accession NP_690865.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PYC1.

[59607] RAB-R (Accession NP_006067.2) is another GAM8297 target gene, herein designated TARGET GENE. RAB-R BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RAB-R, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RAB-R BINDING SITE, designated SEQ ID:14904, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59608] Another function of GAM8297 is therefore inhibition of RAB-R (Accession NP_006067.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RAB-R.

[59609] Retinoic acid induced 1 (RAI1, Accession NP_109590.2) is another GAM8297 target gene, herein designated TARGET

GENE. RAI1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by RAI1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RAI1 BINDING SITE, designated SEQ ID:5307, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

- [59610] Another function of GAM8297 is therefore inhibition of Retinoic acid induced 1 (RAI1, Accession NP_109590.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RAI1.
- [59611] Ras association (ralgds/af-6) domain family 2 (RASSF2, Accession NP_739580.1) is another GAM8297 target gene, herein designated TARGET GENE. RASSF2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by RASSF2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RASSF2 BINDING SITE, designated SEQ ID:8667, to the

nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59612] Another function of GAM8297 is therefore inhibition of Ras association (ralgds/af-6) domain family 2 (RASSF2, Accession NP_739580.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RASSF2.

[59613] Ras association (ralgds/af-6) domain family 2 (RASSF2, Accession NP_739579.1) is another GAM8297 target gene, herein designated TARGET GENE. RASSF2 BINDING SITE is a target binding site found in the 3` untranslated region of multiple transcripts of mRNA encoded by RASSF2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RASSF2 BINDING SITE, designated SEQ ID:8667, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59614] Another function of GAM8297 is therefore inhibition of Ras association (ralgds/af-6) domain family 2 (RASSF2, Accession NP_739579.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RASSF2.

[59615] Ras association (ralgds/af-6) domain family 2 (RASSF2, Accession NP_055552.1) is another GAM8297 target gene, herein designated TARGET GENE. RASSF2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by RASSF2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RASSF2 BINDING SITE, designated SEQ ID:8667, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59616] Another function of GAM8297 is therefore inhibition of Ras association (ralgds/af-6) domain family 2 (RASSF2, Accession NP_055552.1). Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RASSF2.

[59617] Rna binding motif protein 3 (RBM3, Accession NP_006734.1) is another GAM8297 target gene, herein designated TARGET GENE. RBM3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RBM3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the

nucleotide sequences of RBM3 BINDING SITE, designated SEQ ID:9588, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59618] Another function of GAM8297 is therefore inhibition of Rna binding motif protein 3 (RBM3, Accession NP_006734.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RBM3.

[59619] RDH-E2 (Accession NP_620419.1) is another GAM8297 target gene, herein designated TARGET GENE. RDH-E2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RDH-E2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RDH-E2 BINDING SITE, designated SEQ ID:6845, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59620] Another function of GAM8297 is therefore inhibition of RDH-E2 (Accession NP_620419.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RDH-

E2.

[59621] Ras-like, estrogen-regulated, growth-inhibitor (RERG, Accession NP_116307.1) is another GAM8297 target gene, herein designated TARGET GENE. RERG BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by RERG, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RERG BINDING SITE, designated SEQ ID:16494, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59622] Another function of GAM8297 is therefore inhibition of Ras-like, estrogen-regulated, growth-inhibitor (RERG, Accession NP_116307.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RERG.

[59623] RGL (Accession NP_055964.2) is another GAM8297 target gene, herein designated TARGET GENE. RGL BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by RGL, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the comple-

mentarity of the nucleotide sequences of RGL BINDING SITE, designated SEQ ID:5364, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59624] Another function of GAM8297 is therefore inhibition of RGL (Accession NP_055964.2), a gene which is involved in nucleotide exchange factor. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RGL.

[59625] The function of RGL and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM51.1.Regulator of g-protein signalling 11 (RGS11, Accession NP_003825.1) is another GAM8297 target gene, herein designated TARGET GENE. RGS11 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RGS11, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RGS11 BINDING SITE, designated SEQ ID:2788, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59626] Another function of GAM8297 is therefore inhibition of Regulator of g-protein signalling 11 (RGS11, Accession NP_003825.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RGS11.

[59627] Ring finger protein 7 (RNF7, Accession NP_055060.1) is another GAM8297 target gene, herein designated TARGET GENE. RNF7 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RNF7, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RNF7 BINDING SITE, designated SEQ ID:1071, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59628] Another function of GAM8297 is therefore inhibition of Ring finger protein 7 (RNF7, Accession NP_055060.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RNF7.

[59629] Roundabout, axon guidance receptor, homolog 1 (drosophila) (ROBO1, Accession NP_598334.1) is another GAM8297 target gene, herein designated TARGET GENE.

ROBO1 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by ROBO1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ROBO1 BINDING SITE, designated SEQ ID:17266, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59630] Another function of GAM8297 is therefore inhibition of Roundabout, axon guidance receptor, homolog 1 (drosophila) (ROBO1, Accession NP_598334.1), a gene which is an axon guidance receptor. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ROBO1.

[59631] The function of ROBO1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM67.2. Ryanodine receptor 1 (skeletal) (RYR1, Accession NP_000531.1) is another GAM8297 target gene, herein designated TARGET GENE. RYR1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RYR1, corresponding to a target bind-

ing site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RYR1 BINDING SITE, designated SEQ ID:5163, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59632] Another function of GAM8297 is therefore inhibition of Ryanodine receptor 1 (skeletal) (RYR1, Accession NP_000531.1), a gene which acts as a calcium release channel of sarcoplasmic reticulum and therefore may be associated with Malignant hyperthermia (mh) and of central core disease of muscle (ccd). mh. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of Malignant hyperthermia (mh) and of central core disease of muscle (ccd). mh, and of other diseases and clinical conditions associated with RYR1.

[59633] The function of RYR1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM1975.2.SARM1 (Accession NP_055892.1) is another GAM8297 target gene, herein designated TARGET GENE. SARM1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SARM1, cor-

responding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SARM1 BINDING SITE, designated SEQ ID:3114, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59634] Another function of GAM8297 is therefore inhibition of SARM1 (Accession NP_055892.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SARM1.

[59635] Syndecan 3 (n-syndecan) (SDC3, Accession NP_055469.1) is another GAM8297 target gene, herein designated TARGET GENE. SDC3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SDC3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SDC3 BINDING SITE, designated SEQ ID:2696, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59636] Another function of GAM8297 is therefore inhibition of Syndecan 3 (n-syndecan) (SDC3, Accession NP_055469.1) . Accordingly, utilities of GAM8297 include diagnosis,

prevention and treatment of diseases and clinical conditions associated with SDC3.

[59637] SEF (Accession NP_060033.1) is another GAM8297 target gene, herein designated TARGET GENE. SEF BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SEF, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SEF BINDING SITE, designated SEQ ID:2366, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59638] Another function of GAM8297 is therefore inhibition of SEF (Accession NP_060033.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SEF.

[59639] Sema domain, immunoglobulin domain (ig), transmembrane domain (tm) and short cytoplasmic domain, (semaphorin) 4f (SEMA4F, Accession NP_004254.2) is another GAM8297 target gene, herein designated TARGET GENE. SEMA4F BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SEMA4F, corresponding to a target binding site such as

BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SEMA4F BINDING SITE, designated SEQ ID:17986, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59640] Another function of GAM8297 is therefore inhibition of Sema domain, immunoglobulin domain (ig), transmembrane domain (tm) and short cytoplasmic domain, (semaphorin) 4f (SEMA4F, Accession NP_004254.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SEMA4F.

[59641] Serine (or cysteine) proteinase inhibitor, clade b (ovalbumin), member 6 (SERPINB6, Accession NP_004559.3) is another GAM8297 target gene, herein designated TARGET GENE. SERPINB6 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SERPINB6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SERPINB6 BINDING SITE, designated SEQ ID:16752, to the nucleotide se-

quence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59642] Another function of GAM8297 is therefore inhibition of Serine (or cysteine) proteinase inhibitor, clade b (ovalbumin), member 6 (SERPINB6, Accession NP_004559.3), a gene which inhibits thrombin. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SERPINB6.

[59643] The function of SERPINB6 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM830.1.SH2B (Accession NP_056318.1) is another GAM8297 target gene, herein designated TARGET GENE. SH2B BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SH2B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SH2B BINDING SITE, designated SEQ ID:4036, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59644] Another function of GAM8297 is therefore inhibition of

SH2B (Accession NP_056318.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SH2B.

[59645] Sh3-domain binding protein 2 (SH3BP2, Accession NP_003014.2) is another GAM8297 target gene, herein designated TARGET GENE. SH3BP2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SH3BP2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SH3BP2 BINDING SITE, designated SEQ ID:14484, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59646] Another function of GAM8297 is therefore inhibition of Sh3-domain binding protein 2 (SH3BP2, Accession NP_003014.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SH3BP2.

[59647] SHAPY (Accession NP_620148.1) is another GAM8297 target gene, herein designated TARGET GENE. SHAPY BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SHAPY, corresponding

to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SHAPY BINDING SITE, designated SEQ ID:18309, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59648] Another function of GAM8297 is therefore inhibition of SHAPY (Accession NP_620148.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SHAPY.

[59649] Solute carrier family 17 (sodium phosphate), member 2 (SLC17A2, Accession NP_005826.1) is another GAM8297 target gene, herein designated TARGET GENE. SLC17A2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SLC17A2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC17A2 BINDING SITE, designated SEQ ID:2863, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59650] Another function of GAM8297 is therefore inhibition of Solute carrier family 17 (sodium phosphate), member 2

(SLC17A2, Accession NP_005826.1), a gene which is a putative type 1 sodium phosphate transporter and therefore may be associated with Autosomally mendelian hypophosphatemias. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of Autosomally mendelian hypophosphatemias, and of other diseases and clinical conditions associated with SLC17A2.

[59651] The function of SLC17A2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM1975.1. Solute carrier family 26 (sulfate transporter), member 1 (SLC26A1, Accession NP_071325.2) is another GAM8297 target gene, herein designated TARGET GENE. SLC26A1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by SLC26A1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC26A1 BINDING SITE, designated SEQ ID:8035, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59652] Another function of GAM8297 is therefore inhibition of

Solute carrier family 26 (sulfate transporter), member 1 (SLC26A1, Accession NP_071325.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SLC26A1.

[59653] Solute carrier family 6 (neurotransmitter transporter, gaba), member 1 (SLC6A1, Accession NP_003033.1) is another GAM8297 target gene, herein designated TARGET GENE. SLC6A1 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by SLC6A1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC6A1 BINDING SITE, designated SEQ ID:2172, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59654] Another function of GAM8297 is therefore inhibition of Solute carrier family 6 (neurotransmitter transporter, gaba), member 1 (SLC6A1, Accession NP_003033.1), a gene which terminates the action of gaba by its high affinity sodium- dependent reuptake into presynaptic terminals. Accordingly, utilities of GAM8297 include diagno-

sis, prevention and treatment of diseases and clinical conditions associated with SLC6A1.

[59655] The function of SLC6A1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM969.2.SLC9A8 (Accession XP_030524.2) is another GAM8297 target gene, herein designated TARGET GENE. SLC9A8 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SLC9A8, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC9A8 BINDING SITE, designated SEQ ID:1781, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59656] Another function of GAM8297 is therefore inhibition of SLC9A8 (Accession XP_030524.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SLC9A8.

[59657] Son dna binding protein (SON, Accession NP_115571.1) is another GAM8297 target gene, herein designated TARGET GENE. SON BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of

mRNA encoded by SON, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SON BINDING SITE, designated SEQ ID:2947, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59658] Another function of GAM8297 is therefore inhibition of Son dna binding protein (SON, Accession NP_115571.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SON.

[59659] Spir-1 (Accession XP_290818.1) is another GAM8297 target gene, herein designated TARGET GENE. Spir-1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by Spir-1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of Spir-1 BINDING SITE, designated SEQ ID:18344, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59660] Another function of GAM8297 is therefore inhibition of

Spir-1 (Accession XP_290818.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with Spir-1.

[59661] Sprouty homolog 3 (drosophila) (SPRY3, Accession NP_005831.1) is another GAM8297 target gene, herein designated TARGET GENE. SPRY3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SPRY3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SPRY3 BINDING SITE, designated SEQ ID:16967, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59662] Another function of GAM8297 is therefore inhibition of Sprouty homolog 3 (drosophila) (SPRY3, Accession NP_005831.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SPRY3.

[59663] Serine/arginine repetitive matrix 1 (SRRM1, Accession NP_005830.1) is another GAM8297 target gene, herein designated TARGET GENE. SRRM1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA

encoded by SRRM1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SRRM1 BINDING SITE, designated SEQ ID:4656, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59664] Another function of GAM8297 is therefore inhibition of Serine/arginine repetitive matrix 1 (SRRM1, Accession NP_005830.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SRRM1.

[59665] SSB1 (Accession NP_079382.2) is another GAM8297 target gene, herein designated TARGET GENE. SSB1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SSB1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SSB1 BINDING SITE, designated SEQ ID:8921, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59666] Another function of GAM8297 is therefore inhibition of

SSB1 (Accession NP_079382.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SSB1.

[59667] Synaptotagmin viii (SYT8, Accession NP_612634.1) is another GAM8297 target gene, herein designated TARGET GENE. SYT8 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SYT8, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SYT8 BINDING SITE, designated SEQ ID:6528, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59668] Another function of GAM8297 is therefore inhibition of Synaptotagmin viii (SYT8, Accession NP_612634.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SYT8.

[59669] Tafazzin (cardiomyopathy, dilated 3a (x-linked); endocardial fibroelastosis 2; barth syndrome) (TAZ, Accession NP_000107.1) is another GAM8297 target gene, herein designated TARGET GENE. TAZ BINDING SITE is a target binding site found in the 3' untranslated region of multi-

ple transcripts of mRNA encoded by TAZ, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TAZ BINDING SITE, designated SEQ ID:490, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59670] Another function of GAM8297 is therefore inhibition of Tafazzin (cardiomyopathy, dilated 3a (x-linked); endocardial fibroelastosis 2; barth syndrome) (TAZ, Accession NP_000107.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TAZ.

[59671] Tafazzin (cardiomyopathy, dilated 3a (x-linked); endocardial fibroelastosis 2; barth syndrome) (TAZ, Accession NP_851829.1) is another GAM8297 target gene, herein designated TARGET GENE. TAZ BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by TAZ, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TAZ BINDING SITE, designated SEQ ID:490, to the nucleotide

sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59672] Another function of GAM8297 is therefore inhibition of Tafazzin (cardiomyopathy, dilated 3a (x-linked); endocardial fibroelastosis 2; barth syndrome) (TAZ, Accession NP_851829.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TAZ.

[59673] Tafazzin (cardiomyopathy, dilated 3a (x-linked); endocardial fibroelastosis 2; barth syndrome) (TAZ, Accession NP_851830.1) is another GAM8297 target gene, herein designated TARGET GENE. TAZ BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by TAZ, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TAZ BINDING SITE, designated SEQ ID:490, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59674] Another function of GAM8297 is therefore inhibition of Tafazzin (cardiomyopathy, dilated 3a (x-linked); endocardial fibroelastosis 2; barth syndrome) (TAZ, Accession

NP_851830.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TAZ.

[59675] Tafazzin (cardiomyopathy, dilated 3a (x-linked); endocardial fibroelastosis 2; barth syndrome) (TAZ, Accession NP_851828.1) is another GAM8297 target gene, herein designated TARGET GENE. TAZ BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by TAZ, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TAZ BINDING SITE, designated SEQ ID:490, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59676] Another function of GAM8297 is therefore inhibition of Tafazzin (cardiomyopathy, dilated 3a (x-linked); endocardial fibroelastosis 2; barth syndrome) (TAZ, Accession NP_851828.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TAZ.

[59677] Tafazzin (cardiomyopathy, dilated 3a (x-linked); endocardial fibroelastosis 2; barth syndrome) (TAZ, Accession

NP_851831.1) is another GAM8297 target gene, herein designated TARGET GENE. TAZ BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by TAZ, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TAZ BINDING SITE, designated SEQ ID:490, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59678] Another function of GAM8297 is therefore inhibition of Tafazzin (cardiomyopathy, dilated 3a (x-linked); endocardial fibroelastosis 2; Barth syndrome) (TAZ, Accession NP_851831.1). Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TAZ.

[59679] Tbc1 domain family, member 4 (TBC1D4, Accession NP_055647.1) is another GAM8297 target gene, herein designated TARGET GENE. TBC1D4 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TBC1D4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the comple-

mentarity of the nucleotide sequences of TBC1D4 BINDING SITE, designated SEQ ID:748, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59680] Another function of GAM8297 is therefore inhibition of Tbc1 domain family, member 4 (TBC1D4, Accession NP_055647.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TBC1D4.

[59681] T-box 6 (TBX6, Accession NP_004599.2) is another GAM8297 target gene, herein designated TARGET GENE. TBX6 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by TBX6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TBX6 BINDING SITE, designated SEQ ID:6888, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59682] Another function of GAM8297 is therefore inhibition of T-box 6 (TBX6, Accession NP_004599.2), a gene which is a probable transcriptional regulator involved in develop-

mental processes. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TBX6.

[59683] The function of TBX6 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM59.1.T-box 6 (TBX6, Accession NP_542936.1) is another GAM8297 target gene, herein designated TARGET GENE. TBX6 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by TBX6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TBX6 BINDING SITE, designated SEQ ID:6888, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59684] Another function of GAM8297 is therefore inhibition of T-box 6 (TBX6, Accession NP_542936.1), a gene which is a probable transcriptional regulator involved in developmental processes. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TBX6.

[59685] The function of TBX6 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM59.1.T-cell leukemia/lymphoma 6 (TCL6, Accession NP_036600.2) is another GAM8297 target gene, herein designated TARGET GENE. TCL6 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by TCL6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TCL6 BINDING SITE, designated SEQ ID:18755, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59686] Another function of GAM8297 is therefore inhibition of T-cell leukemia/lymphoma 6 (TCL6, Accession NP_036600.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TCL6.

[59687] T-cell leukemia/lymphoma 6 (TCL6, Accession NP_055233.1) is another GAM8297 target gene, herein designated TARGET GENE. TCL6 BINDING SITE is a target binding site found in the 5' untranslated region of multi-

ple transcripts of mRNA encoded by TCL6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TCL6 BINDING SITE, designated SEQ ID:18755, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59688] Another function of GAM8297 is therefore inhibition of T-cell leukemia/lymphoma 6 (TCL6, Accession NP_055233.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TCL6.

[59689] T-cell leukemia/lymphoma 6 (TCL6, Accession NP_065577.2) is another GAM8297 target gene, herein designated TARGET GENE. TCL6 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by TCL6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TCL6 BINDING SITE, designated SEQ ID:18755, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59690] Another function of GAM8297 is therefore inhibition of T-cell leukemia/lymphoma 6 (TCL6, Accession NP_065577.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TCL6.

[59691] T-cell leukemia/lymphoma 6 (TCL6, Accession NP_065575.1) is another GAM8297 target gene, herein designated TARGET GENE. TCL6 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by TCL6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TCL6 BINDING SITE, designated SEQ ID:18755, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59692] Another function of GAM8297 is therefore inhibition of T-cell leukemia/lymphoma 6 (TCL6, Accession NP_065575.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TCL6.

[59693] Tight junction protein 2 (zona occludens 2) (TJP2, Accession NP_004808.1) is another GAM8297 target gene,

herein designated TARGET GENE. TJP2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TJP2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TJP2 BINDING SITE, designated SEQ ID:15651, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59694] Another function of GAM8297 is therefore inhibition of Tight junction protein 2 (zona occludens 2) (TJP2, Accession NP_004808.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TJP2.

[59695] Transmembrane protein 2 (TMEM2, Accession NP_037522.1) is another GAM8297 target gene, herein designated TARGET GENE. TMEM2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TMEM2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TMEM2 BINDING SITE, designated SEQ ID:1387, to the nucleotide sequence of

GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59696] Another function of GAM8297 is therefore inhibition of Transmembrane protein 2 (TMEM2, Accession NP_037522.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TMEM2.

[59697] Transmembrane protease, serine 2 (TMPRSS2, Accession NP_005647.2) is another GAM8297 target gene, herein designated TARGET GENE. TMPRSS2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TMPRSS2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TMPRSS2 BINDING SITE, designated SEQ ID:5188, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59698] Another function of GAM8297 is therefore inhibition of Transmembrane protease, serine 2 (TMPRSS2, Accession NP_005647.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TMPRSS2.

[59699] Tumor necrosis factor receptor superfamily, member 1b (TNFRSF1B, Accession NP_001057.1) is another GAM8297 target gene, herein designated TARGET GENE. TNFRSF1B BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TNFRSF1B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TNFRSF1B BINDING SITE, designated SEQ ID:11026, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59700] Another function of GAM8297 is therefore inhibition of Tumor necrosis factor receptor superfamily, member 1b (TNFRSF1B, Accession NP_001057.1), a gene which mediates proinflammatory cellular responses. and therefore may be associated with Familial combined hyperlipidemia. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of Familial combined hyperlipidemia., and of other diseases and clinical conditions associated with TNFRSF1B.

[59701] The function of TNFRSF1B and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM72.1. Translocase of outer mitochondrial membrane 70 homolog a (yeast) (TOMM70A, Accession NP_055635.1) is another GAM8297 target gene, herein designated TARGET GENE. TOMM70A BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TOMM70A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TOMM70A BINDING SITE, designated SEQ ID:18168, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59702] Another function of GAM8297 is therefore inhibition of Translocase of outer mitochondrial membrane 70 homolog a (yeast) (TOMM70A, Accession NP_055635.1). Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TOMM70A.

[59703] Topoisomerase (dna) ii alpha 170kda (TOP2A, Accession NP_001058.2) is another GAM8297 target gene, herein designated TARGET GENE. TOP2A BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TOP2A, corresponding to a target binding site

such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TOP2A BINDING SITE, designated SEQ ID:15250, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59704] Another function of GAM8297 is therefore inhibition of Topoisomerase (dna) ii alpha 170kda (TOP2A, Accession NP_001058.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TOP2A.

[59705] Tripartite motif-containing 26 (TRIM26, Accession NP_003440.1) is another GAM8297 target gene, herein designated TARGET GENE. TRIM26 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TRIM26, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TRIM26 BINDING SITE, designated SEQ ID:6153, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59706] Another function of GAM8297 is therefore inhibition of

Tripartite motif-containing 26 (TRIM26, Accession NP_003440.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TRIM26.

[59707] TRIPIN (Accession NP_689737.1) is another GAM8297 target gene, herein designated TARGET GENE. TRIPIN BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TRIPIN, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TRIPIN BINDING SITE, designated SEQ ID:13987, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59708] Another function of GAM8297 is therefore inhibition of TRIPIN (Accession NP_689737.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TRIPIN.

[59709] Tubby homolog (mouse) (TUB, Accession NP_813977.1) is another GAM8297 target gene, herein designated TARGET GENE. TUB BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by TUB, corresponding to a target binding

site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TUB BINDING SITE, designated SEQ ID:4633, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59710] Another function of GAM8297 is therefore inhibition of Tubby homolog (mouse) (TUB, Accession NP_813977.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TUB.

[59711] Tubby homolog (mouse) (TUB, Accession NP_003311.2) is another GAM8297 target gene, herein designated TARGET GENE. TUB BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by TUB, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TUB BINDING SITE, designated SEQ ID:4633, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59712] Another function of GAM8297 is therefore inhibition of

Tubby homolog (mouse) (TUB, Accession NP_003311.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TUB.

[59713] Ubiquitin-conjugating enzyme e2 variant 1 (UBE2V1, Accession NP_071887.1) is another GAM8297 target gene, herein designated TARGET GENE. UBE2V1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by UBE2V1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of UBE2V1 BINDING SITE, designated SEQ ID:8584, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59714] Another function of GAM8297 is therefore inhibition of Ubiquitin-conjugating enzyme e2 variant 1 (UBE2V1, Accession NP_071887.1), a gene which may play a role in signaling for DNA repair. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with UBE2V1.

[59715] The function of UBE2V1 and its association with various diseases and clinical conditions, has been established by

previous studies, as described hereinabove with reference to GAM44.1.Ubiquitin-conjugating enzyme e2 variant 1 (UBE2V1, Accession NP_003340.1) is another GAM8297 target gene, herein designated TARGET GENE. UBE2V1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by UBE2V1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of UBE2V1 BINDING SITE, designated SEQ ID:8584, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59716] Another function of GAM8297 is therefore inhibition of Ubiquitin-conjugating enzyme e2 variant 1 (UBE2V1, Accession NP_003340.1), a gene which may play a role in signaling for DNA repair. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with UBE2V1.

[59717] The function of UBE2V1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM44.1.Ubiquitin-conjugating enzyme e2 variant 1

(UBE2V1, Accession NP_068823.1) is another GAM8297 target gene, herein designated TARGET GENE. UBE2V1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by UBE2V1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of UBE2V1 BINDING SITE, designated SEQ ID:8584, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59718] Another function of GAM8297 is therefore inhibition of Ubiquitin-conjugating enzyme e2 variant 1 (UBE2V1, Accession NP_068823.1), a gene which may play a role in signaling for DNA repair. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with UBE2V1.

[59719] The function of UBE2V1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM44.1.UEV3 (Accession NP_060784.2) is another GAM8297 target gene, herein designated TARGET GENE. UEV3 BINDING SITE is a target binding site found in the 3'

untranslated region of mRNA encoded by UEV3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of UEV3 BINDING SITE, designated SEQ ID:10736, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59720] Another function of GAM8297 is therefore inhibition of UEV3 (Accession NP_060784.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with UEV3.

[59721] Unc-5 homolog b (c. elegans) (UNC5C, Accession NP_003719.2) is another GAM8297 target gene, herein designated TARGET GENE. UNC5C BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by UNC5C, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of UNC5C BINDING SITE, designated SEQ ID:8079, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59722] Another function of GAM8297 is therefore inhibition of

Unc-5 homolog b (c. elegans) (UNC5C, Accession NP_003719.2), a gene which is a putative receptor for netrin, which is involved in axon guidance. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with UNC5C.

[59723] The function of UNC5C and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM190.1. Uroporphyrinogen iii synthase (congenital erythropoietic porphyria) (UROS, Accession NP_000366.1) is another GAM8297 target gene, herein designated TARGET GENE. UROS BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by UROS, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of UROS BINDING SITE, designated SEQ ID:1029, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59724] Another function of GAM8297 is therefore inhibition of Uroporphyrinogen iii synthase (congenital erythropoietic porphyria) (UROS, Accession NP_000366.1), a gene which

is the fourth enzyme in heme biosynthesis pathway and therefore is associated with Congenital erythropoietic porphyria (cep). Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of Congenital erythropoietic porphyria (cep), and of other diseases and clinical conditions associated with UROS.

[59725] The function of UROS and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM264.1. Vimentin (VIM, Accession NP_003371.1) is another GAM8297 target gene, herein designated TARGET GENE. VIM BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by VIM, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of VIM BINDING SITE, designated SEQ ID:14629, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59726] Another function of GAM8297 is therefore inhibition of Vimentin (VIM, Accession NP_003371.1), a gene which is the class-iii intermediate filaments found in various non-epithelial cells. Accordingly, utilities of GAM8297 include

diagnosis, prevention and treatment of diseases and clinical conditions associated with VIM.

[59727] The function of VIM and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM3533.1.VIP32 (Accession NP_068378.1) is another GAM8297 target gene, herein designated TARGET GENE. VIP32 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by VIP32, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of VIP32 BINDING SITE, designated SEQ ID:14426, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59728] Another function of GAM8297 is therefore inhibition of VIP32 (Accession NP_068378.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with VIP32.

[59729] Wnt1 inducible signaling pathway protein 1 (WISP1, Accession NP_003873.1) is another GAM8297 target gene, herein designated TARGET GENE. WISP1 BINDING SITE is a target binding site found in the 3' untranslated region of

multiple transcripts of mRNA encoded by WISP1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of WISP1 BINDING SITE, designated SEQ ID:2051, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59730] Another function of GAM8297 is therefore inhibition of Wnt1 inducible signaling pathway protein 1 (WISP1, Accession NP_003873.1), a gene which is a member of connective tissue growth factor family. Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with WISP1.

[59731] The function of WISP1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM629.1.Zinc finger protein 282 (ZNF282, Accession NP_003566.1) is another GAM8297 target gene, herein designated TARGET GENE. ZNF282 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by ZNF282, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of ZNF282 BINDING SITE, designated SEQ ID:11281, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59732] Another function of GAM8297 is therefore inhibition of Zinc finger protein 282 (ZNF282, Accession NP_003566.1). Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF282.

[59733] Zinc finger protein 282 (ZNF282, Accession XP_114578.1) is another GAM8297 target gene, herein designated TARGET GENE. ZNF282 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by ZNF282, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF282 BINDING SITE, designated SEQ ID:11281, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59734] Another function of GAM8297 is therefore inhibition of Zinc finger protein 282 (ZNF282, Accession XP_114578.1). Accordingly, utilities of GAM8297 include diagnosis,

prevention and treatment of diseases and clinical conditions associated with ZNF282.

[59735] Zinc finger protein 337 (ZNF337, Accession NP_056470.1) is another GAM8297 target gene, herein designated TARGET GENE. ZNF337 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZNF337, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF337 BINDING SITE, designated SEQ ID:5587, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59736] Another function of GAM8297 is therefore inhibition of Zinc finger protein 337 (ZNF337, Accession NP_056470.1). Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF337.

[59737] Zinc finger protein 76 (expressed in testis) (ZNF76, Accession NP_003418.2) is another GAM8297 target gene, herein designated TARGET GENE. ZNF76 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZNF76, corresponding to a target bind-

ing site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF76 BINDING SITE, designated SEQ ID:14384, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59738] Another function of GAM8297 is therefore inhibition of Zinc finger protein 76 (expressed in testis) (ZNF76, Accession NP_003418.2) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF76.

[59739] Zinc finger protein, subfamily 1a, 1 (ikaros) (ZNFN1A1, Accession NP_006051.1) is another GAM8297 target gene, herein designated TARGET GENE. ZNFN1A1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZNFN1A1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNFN1A1 BINDING SITE, designated SEQ ID:1221, to the nucleotide sequence of GAM8297 RNA, herein designated GAM RNA, also designated SEQ ID:367.

[59740] Another function of GAM8297 is therefore inhibition of

Zinc finger protein, subfamily 1a, 1 (ikaros) (ZNFN1A1, Accession NP_006051.1) . Accordingly, utilities of GAM8297 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNFN1A1.

[59741]

[59742] Fig. 8 further provides a conceptual description of a novel bioinformatically detected of the present invention, referred to here as Genomic Address Messenger 8358 (GAM8358), which modulates expression of respective target genes thereof, the function and utility of which target genes is known in the art.

[59743] GAM8358 is a novel bioinformatically detected regulatory, non protein coding, micro RNA (miRNA) gene. The method by which GAM8358 was detected is described hereinabove with reference to Figs. 8-15.

[59744] GAM8358 gene, herein designated GAM GENE, and GAM8358 target gene, herein designated TARGET GENE, are human genes contained in the human genome.

[59745] GAM8358 gene encodes a GAM8358 precursor RNA, herein designated GAM PRECURSOR RNA. Similar to other miRNA genes, and unlike most ordinary genes, GAM8358 precursor RNA does not encode a protein. A nucleotide sequence identical or highly similar to the nucleotide se-

quence of GAM8358 precursor RNA is designated SEQ ID:189, and is provided hereinbelow with reference to the sequence listing part.

[59746] GAM8358 precursor RNA folds onto itself, forming GAM8358 folded precursor RNA, herein designated GAM FOLDED PRECURSOR RNA, which has a two-dimensional `hairpin structure`. As is well known in the art, this `hairpin structure`, is typical of RNA encoded by miRNA genes, and is due to the fact that the nucleotide sequence of the first half of the RNA encoded by a miRNA gene is an accurate or partial inversed-reversed sequence of the nucleotide sequence of the second half thereof.

[59747] GAM8358 precursor RNA folds onto itself, forming GAM8358 folded precursor RNA, herein designated GAM FOLDED PRECURSOR RNA, which has a two-dimensional `hairpin structure`. As is well known in the art, this `hairpin structure`, is typical of RNA encoded by miRNA genes, and is due to the fact that the nucleotide sequence of the first half of the RNA encoded by a miRNA gene is an accurate or partial reverse-complementary sequence of the nucleotide sequence of the second half thereof.

[59748] Nucleotide sequence of GAM8358 precursor RNA, designated SEQ-ID: 189, and a schematic representation of a

predicted secondary folding of GAM8358 folded precursor RNA are further described with reference to Table 2, hereby incorporated by reference.

[59749] An enzyme complex designated DICER COMPLEX, `dices` the GAM8358 folded precursor RNA into GAM8358 RNA, herein designated GAM RNA, a single stranded ~22 nt long RNA segment. As is known in the art, `dicing` of a hairpin structured RNA precursor product into a short ~22nt RNA segment is catalyzed by an enzyme complex comprising an enzyme called Dicer together with other necessary proteins. A probable (GAM Prediction Accuracy Group: C) nucleotide sequence of GAM8358 RNA is designated SEQ ID:255, and is provided hereinbelow with references to the sequence listing part and Table 3, hereby incorporated by reference.

[59750] GAM8358 target gene, herein designated TARGET GENE, encodes a corresponding messenger RNA, GAM8358 target RNA, herein designated GAM TARGET RNA. GAM8358 target RNA comprises three regions, as is typical of mRNA of a protein coding gene: a 5` untranslated region, a protein coding region and a 3` untranslated region, designated 5`UTR, PROTEIN CODING and 3`UTR respectively.

[59751] GAM8358 RNA, herein designated GAM RNA, binds com-

plementarily to one or more target binding sites located in untranslated regions of GAM8358 target RNA, herein designated GAM TARGET RNA. This complementary binding is due to the fact that the nucleotide sequence of GAM8358 RNA is an accurate or a partial inversed-reversed sequence of the nucleotide sequence of each of the target binding sites. As an illustration, Fig. 8 shows three such target binding sites, designated BINDING SITE I, BINDING SITE II and BINDING SITE III respectively. It is appreciated that the number of target binding sites shown in Fig. 8 is meant as an illustration only, and is not meant to be limiting. GAM8358 RNA may have a different number of target binding sites in untranslated regions of a GAM8358 target RNA. It is further appreciated that while Fig. 8 depicts target binding sites in the 3'UTR region, this is meant as an example only. These target binding sites may be located in the 3'UTR region, the 5'UTR region, or in both 3'UTR and 5'UTR regions.

[59752] The complementary binding of GAM8358 RNA, herein designated GAM RNA, to target binding sites on GAM8358 target RNA, herein designated GAM TARGET RNA, such as BINDING SITE I, BINDING SITE II and BINDING SITE III, inhibits translation of GAM8358 target RNA into GAM8358

target protein, herein designated GAM TARGET PROTEIN.
GAM target protein is therefore outlined by a broken line.

[59753] It is appreciated that GAM8358 target gene, herein designated TARGET GENE, in fact represents a plurality of GAM8358 target genes. The mRNA of each one of this plurality of GAM8358 target genes comprises one or more target binding sites, each having a nucleotide sequence which is at least partly complementary to GAM8358 RNA, herein designated GAM RNA, and which when bound by GAM8358 RNA causes inhibition of translation of respective one or more GAM8358 target proteins.

[59754] It is further appreciated by one skilled in the art that the mode of translational inhibition illustrated by Fig. 8 with specific reference to translational inhibition exerted by GAM8358 gene, herein designated GAM GENE, on one or more GAM8358 target genes, herein collectively designated TARGET GENE, is common to other known miRNA genes. As mentioned hereinabove with reference to the background section, although a specific complementary binding site has been demonstrated only for some of the known miRNA genes (primarily Lin-4 and Let-7), all other recently discovered miRNA genes are also believed by those skilled in the art to modulate expression of other

genes by complementary binding, although specific complementary binding sites of these other miRNA genes have not yet been found (Ruvkun G., Perspective: Glimpses of a tiny RNA world, Science 294,779 (2001)).

[59755] It is appreciated that specific functions and accordingly utilities of GAM8358 correlate with, and may be deduced from, the identity of the target genes which GAM8358 binds and inhibits, and the function of these target genes, as elaborated hereinbelow.

[59756]

[59757]

[59758] (Accession NP_061052.1) is a GAM8358 target gene, herein designated TARGET GENE. BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BINDING SITE, designated SEQ ID:11587, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59759] A function of GAM8358 is therefore inhibition of

(Accession NP_061052.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with .

[59760] Alpha-1-b glycoprotein (A1BG, Accession NP_570602.2) is another GAM8358 target gene, herein designated TARGET GENE. A1BG BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by A1BG, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of A1BG BINDING SITE, designated SEQ ID:18906, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59761] Another function of GAM8358 is therefore inhibition of Alpha-1-b glycoprotein (A1BG, Accession NP_570602.2), a gene which a plasma protein of unknown function. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with A1BG.

[59762] The function of A1BG and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM130.1.Atp-binding cassette, sub-family c

(cftr/mrp), member 3 (ABCC3, Accession NP_064422.1) is another GAM8358 target gene, herein designated TARGET GENE. ABCC3 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by ABCC3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ABCC3 BINDING SITE, designated SEQ ID:12771, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59763] Another function of GAM8358 is therefore inhibition of Atp-binding cassette, sub-family c (cftr/mrp), member 3 (ABCC3, Accession NP_064422.1), a gene which may act as an inducible transporter in the biliary and intestinal excretion of organic anions. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ABCC3.

[59764] The function of ABCC3 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM66.2. Atp-binding cassette, sub-family c (cftr/mrp), member 3 (ABCC3, Accession NP_003777.2) is another

GAM8358 target gene, herein designated TARGET GENE. ABCC3 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by ABCC3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ABCC3 BINDING SITE, designated SEQ ID:12771, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59765] Another function of GAM8358 is therefore inhibition of Atp-binding cassette, sub-family c (cftr/mrp), member 3 (ABCC3, Accession NP_003777.2), a gene which may act as an inducible transporter in the biliary and intestinal excretion of organic anions. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ABCC3.

[59766] The function of ABCC3 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM66.2. Atp-binding cassette, sub-family c (cftr/mrp), member 3 (ABCC3, Accession NP_064421.1) is another GAM8358 target gene, herein designated TARGET GENE.

ABCC3 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by ABCC3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ABCC3 BINDING SITE, designated SEQ ID:12771, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59767] Another function of GAM8358 is therefore inhibition of Atp-binding cassette, sub-family c (cftr/mrp), member 3 (ABCC3, Accession NP_064421.1), a gene which may act as an inducible transporter in the biliary and intestinal excretion of organic anions. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ABCC3.

[59768] The function of ABCC3 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM66.2.ACATE2 (Accession NP_036464.1) is another GAM8358 target gene, herein designated TARGET GENE. ACATE2 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by ACATE2,

corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ACATE2 BINDING SITE, designated SEQ ID:11855, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59769] Another function of GAM8358 is therefore inhibition of ACATE2 (Accession NP_036464.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ACATE2.

[59770] Arp1 actin-related protein 1 homolog a, centractin alpha (yeast) (ACTR1A, Accession NP_005727.1) is another GAM8358 target gene, herein designated TARGET GENE. ACTR1A BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ACTR1A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ACTR1A BINDING SITE, designated SEQ ID:19684, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59771] Another function of GAM8358 is therefore inhibition of

Arp1 actin-related protein 1 homolog a, centractin alpha (yeast) (ACTR1A, Accession NP_005727.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ACTR1A.

[59772] Adenosine deaminase, rna-specific (ADAR, Accession NP_056656.1) is another GAM8358 target gene, herein designated TARGET GENE. ADAR BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by ADAR, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ADAR BINDING SITE, designated SEQ ID:12787, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59773] Another function of GAM8358 is therefore inhibition of Adenosine deaminase, rna-specific (ADAR, Accession NP_056656.1), a gene which converts adenosine to inosine in double-stranded RNA. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ADAR.

[59774] The function of ADAR and its association with various dis-

eases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM175.1. Adenosine deaminase, rna-specific (ADAR, Accession NP_001102.1) is another GAM8358 target gene, herein designated TARGET GENE. ADAR BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by ADAR, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ADAR BINDING SITE, designated SEQ ID:12787, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59775] Another function of GAM8358 is therefore inhibition of Adenosine deaminase, rna-specific (ADAR, Accession NP_001102.1), a gene which converts adenosine to inosine in double-stranded RNA. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ADAR.

[59776] The function of ADAR and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM175.1. Adenosine deaminase, rna-specific (ADAR,

Accession NP_056655.1) is another GAM8358 target gene, herein designated TARGET GENE. ADAR BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by ADAR, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ADAR BINDING SITE, designated SEQ ID:12787, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59777] Another function of GAM8358 is therefore inhibition of Adenosine deaminase, rna-specific (ADAR, Accession NP_056655.1), a gene which converts adenosine to inosine in double-stranded RNA. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ADAR.

[59778] The function of ADAR and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM175.1. Adenylate kinase 2 (AK2, Accession NP_037543.1) is another GAM8358 target gene, herein designated TARGET GENE. AK2 BINDING SITE is a target binding site found in the 3' untranslated region of multi-

ple transcripts of mRNA encoded by AK2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of AK2 BINDING SITE, designated SEQ ID:1267, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59779] Another function of GAM8358 is therefore inhibition of Adenylate kinase 2 (AK2, Accession NP_037543.1), a gene which essential for maintenance and cell growth. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with AK2.

[59780] The function of AK2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM385.2.A kinase (prka) anchor protein 6 (AKAP6, Accession NP_004265.3) is another GAM8358 target gene, herein designated TARGET GENE. AKAP6 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by AKAP6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the comple-

mentarity of the nucleotide sequences of AKAP6 BINDING SITE, designated SEQ ID:19508, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59781] Another function of GAM8358 is therefore inhibition of A kinase (prka) anchor protein 6 (AKAP6, Accession NP_004265.3) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with AKAP6.

[59782] ALEX1 (Accession NP_057692.1) is another GAM8358 target gene, herein designated TARGET GENE. ALEX1 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by ALEX1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ALEX1 BINDING SITE, designated SEQ ID:14775, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59783] Another function of GAM8358 is therefore inhibition of ALEX1 (Accession NP_057692.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ALEX1.

[59784] Angiotensin (AMOT, Accession NP_573572.1) is another GAM8358 target gene, herein designated TARGET GENE. AMOT BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by AMOT, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of AMOT BINDING SITE, designated SEQ ID:13810, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59785] Another function of GAM8358 is therefore inhibition of Angiotensin (AMOT, Accession NP_573572.1). Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with AMOT.

[59786] Annexin A13 (ANXA13, Accession NP_004297.1) is another GAM8358 target gene, herein designated TARGET GENE. ANXA13 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ANXA13, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ANXA13 BINDING SITE, designated

SEQ ID:17250, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59787] Another function of GAM8358 is therefore inhibition of Annexin a13 (ANXA13, Accession NP_004297.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ANXA13.

[59788] Adaptor-related protein complex 3, sigma 2 subunit (AP3S2, Accession NP_005820.1) is another GAM8358 target gene, herein designated TARGET GENE. AP3S2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by AP3S2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of AP3S2 BINDING SITE, designated SEQ ID:3119, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59789] Another function of GAM8358 is therefore inhibition of Adaptor-related protein complex 3, sigma 2 subunit (AP3S2, Accession NP_005820.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of

diseases and clinical conditions associated with AP3S2.

[59790] APM1 (Accession NP_004788.1) is another GAM8358 target gene, herein designated TARGET GENE. APM1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by APM1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of APM1 BINDING SITE, designated SEQ ID:12520, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59791] Another function of GAM8358 is therefore inhibition of APM1 (Accession NP_004788.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with APM1.

[59792] APPL (Accession NP_036228.1) is another GAM8358 target gene, herein designated TARGET GENE. APPL BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by APPL, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of APPL BINDING SITE, designated SEQ ID:1547, to the nucleotide sequence

of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59793] Another function of GAM8358 is therefore inhibition of APPL (Accession NP_036228.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with APPL.

[59794] Androgen receptor (dihydrotestosterone receptor; testicular feminization; spinal and bulbar muscular atrophy; kennedy disease) (AR, Accession NP_000035.2) is another GAM8358 target gene, herein designated TARGET GENE. AR BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by AR, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of AR BINDING SITE, designated SEQ ID:6654, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59795] Another function of GAM8358 is therefore inhibition of Androgen receptor (dihydrotestosterone receptor; testicular feminization; spinal and bulbar muscular atrophy; kennedy disease) (AR, Accession NP_000035.2), a gene which are involved in the regulation of eukaryotic gene

expression and affect cellular proliferation and differentiation in target tissues. and therefore is associated with Androgen insensitivity syndrome. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of Androgen insensitivity syndrome, and of other diseases and clinical conditions associated with AR.

[59796] The function of AR and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM47.1.BHD (Accession NP_653207.1) is another GAM8358 target gene, herein designated TARGET GENE. BHD BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by BHD, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BHD BINDING SITE, designated SEQ ID:13544, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59797] Another function of GAM8358 is therefore inhibition of BHD (Accession NP_653207.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BHD.

[59798] B lymphoma mo-mlv insertion region (mouse) (BMI1, Accession NP_005171.4) is another GAM8358 target gene, herein designated TARGET GENE. BMI1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by BMI1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BMI1 BINDING SITE, designated SEQ ID:19346, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59799] Another function of GAM8358 is therefore inhibition of B lymphoma mo-mlv insertion region (mouse) (BMI1, Accession NP_005171.4). Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BMI1.

[59800] Brf1 homolog, subunit of rna polymerase iii transcription initiation factor iiib (s. cerevisiae) (BRF1, Accession NP_663718.1) is another GAM8358 target gene, herein designated TARGET GENE. BRF1 BINDING SITE1 and BRF1 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by BRF1, corresponding to target binding sites such as BIND-

ING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BRF1 BINDING SITE1 and BRF1 BINDING SITE2, designated SEQ ID:674 and SEQ ID:13302 respectively, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59801] Another function of GAM8358 is therefore inhibition of Brf1 homolog, subunit of rna polymerase iii transcription initiation factor iiib (s. cerevisiae) (BRF1, Accession NP_663718.1), a gene which is a general activator of RNA polymerase III. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BRF1.

[59802] The function of BRF1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM140.1. Brf1 homolog, subunit of rna polymerase iii transcription initiation factor iiib (s. cerevisiae) (BRF1, Accession NP_663734.1) is another GAM8358 target gene, herein designated TARGET GENE. BRF1 BINDING SITE1 and BRF1 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by BRF1, corresponding to target binding sites such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BRF1 BINDING SITE1 and BRF1 BINDING SITE2, designated SEQ ID:13302 and SEQ ID:3850 respectively, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59803] Another function of GAM8358 is therefore inhibition of Brf1 homolog, subunit of rna polymerase iii transcription initiation factor iiib (*s. cerevisiae*) (BRF1, Accession NP_663734.1), a gene which is a general activator of RNA polymerase III. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BRF1.

[59804] The function of BRF1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM140.1.Btb (poz) domain containing 5 (BTBD5, Accession NP_060128.1) is another GAM8358 target gene, herein designated TARGET GENE. BTBD5 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by BTBD5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BIND-

ING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BTBD5 BINDING SITE, designated SEQ ID:9813, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59805] Another function of GAM8358 is therefore inhibition of Btb (poz) domain containing 5 (BTBD5, Accession NP_060128.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BTBD5.

[59806] BTBD9 (Accession NP_689946.1) is another GAM8358 target gene, herein designated TARGET GENE. BTBD9 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by BTBD9, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BTBD9 BINDING SITE, designated SEQ ID:9655, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59807] Another function of GAM8358 is therefore inhibition of BTBD9 (Accession NP_689946.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of

diseases and clinical conditions associated with BTBD9.

[59808] Butyrophilin, subfamily 1, member a1 (BTN1A1, Accession NP_001723.1) is another GAM8358 target gene, herein designated TARGET GENE. BTN1A1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by BTN1A1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BTN1A1 BINDING SITE, designated SEQ ID:19954, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59809] Another function of GAM8358 is therefore inhibition of Butyrophilin, subfamily 1, member a1 (BTN1A1, Accession NP_001723.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BTN1A1.

[59810] BZRAP1 (Accession NP_004749.1) is another GAM8358 target gene, herein designated TARGET GENE. BZRAP1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by BZRAP1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of BZRAP1 BINDING SITE, designated SEQ ID:2350, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59811] Another function of GAM8358 is therefore inhibition of BZRAP1 (Accession NP_004749.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BZRAP1.

[59812] c-MIR (Accession NP_659458.1) is another GAM8358 target gene, herein designated TARGET GENE. c-MIR BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by c-MIR, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of c-MIR BINDING SITE, designated SEQ ID:6685, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59813] Another function of GAM8358 is therefore inhibition of c-MIR (Accession NP_659458.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with c-MIR.

[59814] C10orf6 (Accession NP_060591.2) is another GAM8358

target gene, herein designated TARGET GENE. C10orf6 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by C10orf6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C10orf6 BINDING SITE, designated SEQ ID:14001, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59815] Another function of GAM8358 is therefore inhibition of C10orf6 (Accession NP_060591.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C10orf6.

[59816] Chromosome 11 open reading frame 11 (C11orf11, Accession NP_006124.1) is another GAM8358 target gene, herein designated TARGET GENE. C11orf11 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C11orf11, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C11orf11

BINDING SITE, designated SEQ ID:11350, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59817] Another function of GAM8358 is therefore inhibition of Chromosome 11 open reading frame 11 (C11orf11, Accession NP_006124.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C11orf11.

[59818] Chromosome 11 open reading frame 14 (C11orf14, Accession NP_065696.1) is another GAM8358 target gene, herein designated TARGET GENE. C11orf14 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C11orf14, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C11orf14 BINDING SITE, designated SEQ ID:19991, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59819] Another function of GAM8358 is therefore inhibition of Chromosome 11 open reading frame 14 (C11orf14, Accession NP_065696.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases

and clinical conditions associated with C11orf14.

[59820] C14orf58 (Accession NP_060261.1) is another GAM8358 target gene, herein designated TARGET GENE. C14orf58 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C14orf58, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C14orf58 BINDING SITE, designated SEQ ID:9425, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59821] Another function of GAM8358 is therefore inhibition of C14orf58 (Accession NP_060261.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C14orf58.

[59822] C14orf73 (Accession XP_040910.3) is another GAM8358 target gene, herein designated TARGET GENE. C14orf73 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C14orf73, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

C14orf73 BINDING SITE, designated SEQ ID:2248, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59823] Another function of GAM8358 is therefore inhibition of C14orf73 (Accession XP_040910.3) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C14orf73.

[59824] C14orf94 (Accession NP_060285.1) is another GAM8358 target gene, herein designated TARGET GENE. C14orf94 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C14orf94, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C14orf94 BINDING SITE, designated SEQ ID:10799, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59825] Another function of GAM8358 is therefore inhibition of C14orf94 (Accession NP_060285.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C14orf94.

[59826] Chromosome 18 open reading frame 1 (C18orf1, Accession NP_004329.1) is another GAM8358 target gene, herein designated TARGET GENE. C18orf1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C18orf1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C18orf1 BINDING SITE, designated SEQ ID:18134, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59827] Another function of GAM8358 is therefore inhibition of Chromosome 18 open reading frame 1 (C18orf1, Accession NP_004329.1), a gene which displays selective expression, regulated spatially and temporally. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C18orf1.

[59828] The function of C18orf1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM88.1. Chromosome 18 open reading frame 2 (C18orf2, Accession NP_113604.1) is another GAM8358

target gene, herein designated TARGET GENE. C18orf2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C18orf2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C18orf2 BINDING SITE, designated SEQ ID:8513, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59829] Another function of GAM8358 is therefore inhibition of Chromosome 18 open reading frame 2 (C18orf2, Accession NP_113604.1). Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C18orf2.

[59830] Chromosome 1 open reading frame 17 (C1orf17, Accession NP_055916.1) is another GAM8358 target gene, herein designated TARGET GENE. C1orf17 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C1orf17, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C1orf17 BINDING SITE, designated SEQ ID:7471, to the nucleotide se-

quence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59831] Another function of GAM8358 is therefore inhibition of Chromosome 1 open reading frame 17 (C1orf17, Accession NP_055916.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C1orf17.

[59832] Chromosome 20 open reading frame 14 (C20orf14, Accession NP_036601.1) is another GAM8358 target gene, herein designated TARGET GENE. C20orf14 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by C20orf14, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C20orf14 BINDING SITE, designated SEQ ID:14369, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59833] Another function of GAM8358 is therefore inhibition of Chromosome 20 open reading frame 14 (C20orf14, Accession NP_036601.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C20orf14.

[59834] Chromosome 20 open reading frame 150 (C20orf150, Accession XP_037265.1) is another GAM8358 target gene, herein designated TARGET GENE. C20orf150 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C20orf150, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C20orf150 BINDING SITE, designated SEQ ID:1203, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59835] Another function of GAM8358 is therefore inhibition of Chromosome 20 open reading frame 150 (C20orf150, Accession XP_037265.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C20orf150.

[59836] Chromosome 20 open reading frame 166 (C20orf166, Accession NP_848558.1) is another GAM8358 target gene, herein designated TARGET GENE. C20orf166 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by C20orf166, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C20orf166 BINDING SITE, designated SEQ ID:15257, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59837] Another function of GAM8358 is therefore inhibition of Chromosome 20 open reading frame 166 (C20orf166, Accession NP_848558.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C20orf166.

[59838] Chromosome 20 open reading frame 166 (C20orf166, Accession XP_170976.2) is another GAM8358 target gene, herein designated TARGET GENE. C20orf166 BINDING SITE is a target binding site found in the 5` untranslated region of multiple transcripts of mRNA encoded by C20orf166, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C20orf166 BINDING SITE, designated SEQ ID:15257, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59839] Another function of GAM8358 is therefore inhibition of

Chromosome 20 open reading frame 166 (C20orf166, Accession XP_170976.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C20orf166.

[59840] Chromosome 20 open reading frame 177 (C20orf177, Accession XP_290955.1) is another GAM8358 target gene, herein designated TARGET GENE. C20orf177 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C20orf177, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C20orf177 BINDING SITE, designated SEQ ID:14749, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59841] Another function of GAM8358 is therefore inhibition of Chromosome 20 open reading frame 177 (C20orf177, Accession XP_290955.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C20orf177.

[59842] Chromosome 20 open reading frame 24 (C20orf24, Accession NP_061328.1) is another GAM8358 target gene, herein designated TARGET GENE. C20orf24 BINDING SITE

is a target binding site found in the 3' untranslated region of mRNA encoded by C20orf24, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C20orf24 BINDING SITE, designated SEQ ID:15423, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59843] Another function of GAM8358 is therefore inhibition of Chromosome 20 open reading frame 24 (C20orf24, Accession NP_061328.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C20orf24.

[59844] Chromosome 21 open reading frame 90 (C21orf90, Accession NP_694936.1) is another GAM8358 target gene, herein designated TARGET GENE. C21orf90 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C21orf90, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C21orf90 BINDING SITE, designated SEQ ID:2575, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA,

also designated SEQ ID:255.

[59845] Another function of GAM8358 is therefore inhibition of Chromosome 21 open reading frame 90 (C21orf90, Accession NP_694936.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C21orf90.

[59846] Chromosome 22 open reading frame 5 (C22orf5, Accession NP_036396.1) is another GAM8358 target gene, herein designated TARGET GENE. C22orf5 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C22orf5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C22orf5 BINDING SITE, designated SEQ ID:8084, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59847] Another function of GAM8358 is therefore inhibition of Chromosome 22 open reading frame 5 (C22orf5, Accession NP_036396.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C22orf5.

[59848] C6orf55 (Accession NP_057569.2) is another GAM8358

target gene, herein designated TARGET GENE. C6orf55 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C6orf55, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C6orf55 BINDING SITE, designated SEQ ID:6070, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59849] Another function of GAM8358 is therefore inhibition of C6orf55 (Accession NP_057569.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C6orf55.

[59850] Calcium/calmodulin-dependent protein kinase kinase 1, alpha (CAMKK1, Accession NP_115670.1) is another GAM8358 target gene, herein designated TARGET GENE. CAMKK1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CAMKK1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CAMKK1 BINDING SITE, des-

ignated SEQ ID:8178, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

- [59851] Another function of GAM8358 is therefore inhibition of Calcium/calmodulin-dependent protein kinase kinase 1, alpha (CAMKK1, Accession NP_115670.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CAMKK1.
- [59852] Calcium/calmodulin-dependent protein kinase kinase 1, alpha (CAMKK1, Accession NP_757343.1) is another GAM8358 target gene, herein designated TARGET GENE. CAMKK1 BINDING SITE is a target binding site found in the 3` untranslated region of multiple transcripts of mRNA encoded by CAMKK1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CAMKK1 BINDING SITE, designated SEQ ID:8178, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.
- [59853] Another function of GAM8358 is therefore inhibition of Calcium/calmodulin-dependent protein kinase kinase 1,

alpha (CAMKK1, Accession NP_757343.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CAMKK1.

[59854] Chemokine binding protein 2 (CCBP2, Accession NP_001287.2) is another GAM8358 target gene, herein designated TARGET GENE. CCBP2 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by CCBP2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CCBP2 BINDING SITE, designated SEQ ID:17116, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59855] Another function of GAM8358 is therefore inhibition of Chemokine binding protein 2 (CCBP2, Accession NP_001287.2), a gene which binds with relatively high-affinity to the majority of members of the beta-chemokine family. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CCBP2.

[59856] The function of CCBP2 and its association with various

diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM377.2.Cyclin e1 (CCNE1, Accession NP_476530.1) is another GAM8358 target gene, herein designated TARGET GENE. CCNE1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CCNE1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CCNE1 BINDING SITE, designated SEQ ID:6758, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59857] Another function of GAM8358 is therefore inhibition of Cyclin e1 (CCNE1, Accession NP_476530.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CCNE1.

[59858] Cyclin e1 (CCNE1, Accession NP_001229.1) is another GAM8358 target gene, herein designated TARGET GENE. CCNE1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CCNE1, corresponding to a target binding site

such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CCNE1 BINDING SITE, designated SEQ ID:6758, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59859] Another function of GAM8358 is therefore inhibition of Cyclin e1 (CCNE1, Accession NP_001229.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CCNE1.

[59860] Cyclin t2 (CCNT2, Accession NP_001232.1) is another GAM8358 target gene, herein designated TARGET GENE. CCNT2 BINDING SITE is a target binding site found in the 3` untranslated region of multiple transcripts of mRNA encoded by CCNT2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CCNT2 BINDING SITE, designated SEQ ID:2221, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59861] Another function of GAM8358 is therefore inhibition of

Cyclin t2 (CCNT2, Accession NP_001232.1), a gene which is a regulatory subunit of the cyclin- dependent kinase pair (cdk9/cyclin t) complex. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CCNT2.

[59862] The function of CCNT2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM179.1. Cyclin t2 (CCNT2, Accession NP_490595.1) is another GAM8358 target gene, herein designated TARGET GENE. CCNT2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CCNT2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CCNT2 BINDING SITE, designated SEQ ID:2221, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59863] Another function of GAM8358 is therefore inhibition of Cyclin t2 (CCNT2, Accession NP_490595.1), a gene which is a regulatory subunit of the cyclin- dependent kinase pair (cdk9/cyclin t) complex. Accordingly, utilities of

GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CCNT2.

[59864] The function of CCNT2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM179.1. Chemokine (c-c motif) receptor 9 (CCR9, Accession NP_006632.2) is another GAM8358 target gene, herein designated TARGET GENE. CCR9 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CCR9, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CCR9 BINDING SITE, designated SEQ ID:8222, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59865] Another function of GAM8358 is therefore inhibition of Chemokine (c-c motif) receptor 9 (CCR9, Accession NP_006632.2), a gene which binds beta-chemokine family and subsequently transduces a signal by increasing the intracellular calcium ions level. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CCR9.

[59866] The function of CCR9 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM100.1. Chemokine (c-c motif) receptor 9 (CCR9, Accession NP_112477.1) is another GAM8358 target gene, herein designated TARGET GENE. CCR9 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CCR9, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CCR9 BINDING SITE, designated SEQ ID:8222, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59867] Another function of GAM8358 is therefore inhibition of Chemokine (c-c motif) receptor 9 (CCR9, Accession NP_112477.1), a gene which binds beta-chemokine family and subsequently transduces a signal by increasing the intracellular calcium ions level. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CCR9.

[59868] The function of CCR9 and its association with various diseases and clinical conditions, has been established by

previous studies, as described hereinabove with reference to GAM100.1.CCRK (Accession NP_036251.2) is another GAM8358 target gene, herein designated TARGET GENE. CCRK BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CCRK, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CCRK BINDING SITE, designated SEQ ID:14303, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59869] Another function of GAM8358 is therefore inhibition of CCRK (Accession NP_036251.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CCRK.

[59870] CCRK (Accession NP_848519.1) is another GAM8358 target gene, herein designated TARGET GENE. CCRK BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CCRK, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide se-

quences of CCRK BINDING SITE, designated SEQ ID:14303, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59871] Another function of GAM8358 is therefore inhibition of CCRK (Accession NP_848519.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CCRK.

[59872] Cd34 antigen (CD34, Accession NP_001764.1) is another GAM8358 target gene, herein designated TARGET GENE. CD34 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CD34, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CD34 BINDING SITE, designated SEQ ID:18960, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59873] Another function of GAM8358 is therefore inhibition of Cd34 antigen (CD34, Accession NP_001764.1), a gene which is a monomeric cell surface antigen that is selectively expressed on human hematopoietic progenitor cells. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions

associated with CD34.

[59874] The function of CD34 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM38.1.Cdc42 effector protein (rho gtpase binding) 2 (CDC42EP2, Accession NP_006770.1) is another GAM8358 target gene, herein designated TARGET GENE. CDC42EP2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CDC42EP2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CDC42EP2 BINDING SITE, designated SEQ ID:19471, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59875] Another function of GAM8358 is therefore inhibition of Cdc42 effector protein (rho gtpase binding) 2 (CDC42EP2, Accession NP_006770.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CDC42EP2.

[59876] CDK11 (Accession XP_166324.1) is another GAM8358 target gene, herein designated TARGET GENE. CDK11 BIND-

ING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CDK11, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CDK11 BINDING SITE, designated SEQ ID:18586, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59877] Another function of GAM8358 is therefore inhibition of CDK11 (Accession XP_166324.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CDK11.

[59878] CGN (Accession NP_065821.1) is another GAM8358 target gene, herein designated TARGET GENE. CGN BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CGN, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CGN BINDING SITE, designated SEQ ID:16231, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59879] Another function of GAM8358 is therefore inhibition of CGN (Accession NP_065821.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CGN.

[59880] Chordin (CHRD, Accession NP_817088.1) is another GAM8358 target gene, herein designated TARGET GENE. CHRD BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CHRD, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CHRD BINDING SITE, designated SEQ ID:18550, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59881] Another function of GAM8358 is therefore inhibition of Chordin (CHRD, Accession NP_817088.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CHRD.

[59882] Chordin (CHRD, Accession NP_817087.1) is another GAM8358 target gene, herein designated TARGET GENE. CHRD BINDING SITE is a target binding site found in the

3' untranslated region of multiple transcripts of mRNA encoded by CHRD, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CHRD BINDING SITE, designated SEQ ID:18550, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59883] Another function of GAM8358 is therefore inhibition of Chordin (CHRD, Accession NP_817087.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CHRD.

[59884] Carbohydrate (n-acetylglucosamine 6-o) sulfotransferase 7 (CHST7, Accession NP_063939.2) is another GAM8358 target gene, herein designated TARGET GENE. CHST7 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CHST7, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CHST7 BINDING SITE, designated SEQ ID:12624, to the nucleotide sequence of GAM8358 RNA, herein designated

GAM RNA, also designated SEQ ID:255.

[59885] Another function of GAM8358 is therefore inhibition of Carbohydrate (n-acetylglucosamine 6-o) sulfotransferase 7 (CHST7, Accession NP_063939.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CHST7.

[59886] Cockayne syndrome 1 (classical) (CKN1, Accession NP_000073.1) is another GAM8358 target gene, herein designated TARGET GENE. CKN1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CKN1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CKN1 BINDING SITE, designated SEQ ID:10649, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59887] Another function of GAM8358 is therefore inhibition of Cockayne syndrome 1 (classical) (CKN1, Accession NP_000073.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CKN1.

[59888] C-type (calcium dependent, carbohydrate-recognition do-

main) lectin, superfamily member 11 (CLECSF11, Accession NP_569708.1) is another GAM8358 target gene, herein designated TARGET GENE. CLECSF11 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by CLECSF11, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CLECSF11 BINDING SITE, designated SEQ ID:16381, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59889] Another function of GAM8358 is therefore inhibition of C-type (calcium dependent, carbohydrate-recognition domain) lectin, superfamily member 11 (CLECSF11, Accession NP_569708.1), a gene which may play a role in ligand internalization and presentation. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CLECSF11.

[59890] The function of CLECSF11 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM571.1.CLONE25003 (Accession NP_056196.1) is another GAM8358 target gene, herein designated TARGET

GENE. CLONE25003 BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by CLONE25003, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CLONE25003 BINDING SITE, designated SEQ ID:3547, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59891] Another function of GAM8358 is therefore inhibition of CLONE25003 (Accession NP_056196.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CLONE25003.

[59892] Contactin 2 (axonal) (CNTN2, Accession NP_005067.1) is another GAM8358 target gene, herein designated TARGET GENE. CNTN2 BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by CNTN2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CNTN2 BINDING SITE, designated SEQ ID:19963, to the nucleotide sequence of GAM8358

RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59893] Another function of GAM8358 is therefore inhibition of Contactin 2 (axonal) (CNTN2, Accession NP_005067.1), a gene which may play a role in axonal growth and cell adhesion. and therefore may be associated with Malignant gliomas. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of Malignant gliomas, and of other diseases and clinical conditions associated with CNTN2.

[59894] The function of CNTN2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM223.2.COBRA1 (Accession NP_056271.2) is another GAM8358 target gene, herein designated TARGET GENE. COBRA1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by COBRA1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of COBRA1 BINDING SITE, designated SEQ ID:9964, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ

ID:255.

[59895] Another function of GAM8358 is therefore inhibition of COBRA1 (Accession NP_056271.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with COBRA1.

[59896] Collagen, type v, alpha 3 (COL5A3, Accession NP_056534.1) is another GAM8358 target gene, herein designated TARGET GENE. COL5A3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by COL5A3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of COL5A3 BINDING SITE, designated SEQ ID:12577, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59897] Another function of GAM8358 is therefore inhibition of Collagen, type v, alpha 3 (COL5A3, Accession NP_056534.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with COL5A3.

[59898] Cop9 constitutive photomorphogenic homolog subunit 7b

(arabidopsis) (COPS7B, Accession NP_073567.1) is another GAM8358 target gene, herein designated TARGET GENE. COPS7B BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by COPS7B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of COPS7B BINDING SITE, designated SEQ ID:10817, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59899] Another function of GAM8358 is therefore inhibition of Cop9 constitutive photomorphogenic homolog subunit 7b (arabidopsis) (COPS7B, Accession NP_073567.1). Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with COPS7B.

[59900] Crm, cramped-like (drosophila) (CRAMP1L, Accession XP_034570.4) is another GAM8358 target gene, herein designated TARGET GENE. CRAMP1L BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CRAMP1L, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the comple-

mentarity of the nucleotide sequences of CRAMP1L BINDING SITE, designated SEQ ID:8892, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59901] Another function of GAM8358 is therefore inhibition of Crm, cramped-like (drosophila) (CRAMP1L, Accession XP_034570.4) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CRAMP1L.

[59902] Casein kinase 1, gamma 1 (CSNK1G1, Accession NP_071331.1) is another GAM8358 target gene, herein designated TARGET GENE. CSNK1G1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CSNK1G1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CSNK1G1 BINDING SITE, designated SEQ ID:2519, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59903] Another function of GAM8358 is therefore inhibition of Casein kinase 1, gamma 1 (CSNK1G1, Accession NP_071331.1) . Accordingly, utilities of GAM8358 include

diagnosis, prevention and treatment of diseases and clinical conditions associated with CSNK1G1.

[59904] CT120 (Accession NP_079068.1) is another GAM8358 target gene, herein designated TARGET GENE. CT120 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CT120, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CT120 BINDING SITE, designated SEQ ID:4706, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59905] Another function of GAM8358 is therefore inhibition of CT120 (Accession NP_079068.1). Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CT120.

[59906] Cytochrome p450, subfamily iib (phenobarbital-inducible), polypeptide 6 (CYP2B6, Accession NP_000758.1) is another GAM8358 target gene, herein designated TARGET GENE. CYP2B6 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CYP2B6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or

BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CYP2B6 BINDING SITE, designated SEQ ID:11117, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59907] Another function of GAM8358 is therefore inhibition of Cytochrome p450, subfamily iib (phenobarbital-inducible), polypeptide 6 (CYP2B6, Accession NP_000758.1), a gene which oxidizes a variety of structurally unrelated compounds, including steroids, fatty acids, and xenobiotics. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CYP2B6.

[59908] The function of CYP2B6 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1.D12S2489E (Accession NP_031386.1) is another GAM8358 target gene, herein designated TARGET GENE. D12S2489E BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by D12S2489E, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of D12S2489E BINDING SITE, designated SEQ ID:712, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59909] Another function of GAM8358 is therefore inhibition of D12S2489E (Accession NP_031386.1), a gene which interacts in the inhibition and activation of NK cells. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with D12S2489E.

[59910] The function of D12S2489E and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM715.2.Dead/h (asp-glu-ala-asp/his) box polypeptide 11 (chl1-like helicase homolog, *s. cerevisiae*) (DDX11, Accession NP_085913.1) is another GAM8358 target gene, herein designated TARGET GENE. DDX11 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by DDX11, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DDX11 BINDING SITE, designated

SEQ ID:7256, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59911] Another function of GAM8358 is therefore inhibition of Dead/h (asp-glu-ala-asp/his) box polypeptide 11 (chl1-like helicase homolog, *s. cerevisiae*) (DDX11, Accession NP_085913.1), a gene which could be an ATP- dependent DNA- binding helicase and may intervene in cell cycle regulation. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DDX11.

[59912] The function of DDX11 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM63.1. Dead/h (asp-glu-ala-asp/his) box polypeptide 20, 103kda (DDX20, Accession NP_009135.3) is another GAM8358 target gene, herein designated TARGET GENE. DDX20 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by DDX20, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DDX20 BINDING SITE, designated

SEQ ID:2897, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59913] Another function of GAM8358 is therefore inhibition of Dead/h (asp-glu-ala-asp/his) box polypeptide 20, 103kda (DDX20, Accession NP_009135.3), a gene which interacts with SMN and is required for pre- mRNA splicing in the nucleus. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DDX20.

[59914] The function of DDX20 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM869.1.DKFZp434F142 (Accession NP_115630.1) is another GAM8358 target gene, herein designated TARGET GENE. DKFZp434F142 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by DKFZp434F142, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp434F142 BINDING SITE, designated SEQ ID:6913, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also design-

nated SEQ ID:255.

[59915] Another function of GAM8358 is therefore inhibition of DKFZp434F142 (Accession NP_115630.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp434F142.

[59916] DKFZp434I1930 (Accession NP_115631.1) is another GAM8358 target gene, herein designated TARGET GENE. DKFZp434I1930 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZp434I1930, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp434I1930 BINDING SITE, designated SEQ ID:16331, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59917] Another function of GAM8358 is therefore inhibition of DKFZp434I1930 (Accession NP_115631.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp434I1930.

[59918] DKFZp434O0320 (Accession XP_097012.2) is another

GAM8358 target gene, herein designated TARGET GENE. DKFZp434O0320 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by DKFZp434O0320, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp434O0320 BINDING SITE, designated SEQ ID:9070, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59919] Another function of GAM8358 is therefore inhibition of DKFZp434O0320 (Accession XP_097012.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp434O0320.

[59920] DKFZp547C176 (Accession XP_040799.2) is another GAM8358 target gene, herein designated TARGET GENE. DKFZp547C176 BINDING SITE1 and DKFZp547C176 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by DKFZp547C176, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

DKFZp547C176 BINDING SITE1 and DKFZp547C176 BINDING SITE2, designated SEQ ID:9992 and SEQ ID:13108 respectively, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59921] Another function of GAM8358 is therefore inhibition of DKFZp547C176 (Accession XP_040799.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp547C176.

[59922] DKFZP564K0322 (Accession NP_114429.1) is another GAM8358 target gene, herein designated TARGET GENE. DKFZP564K0322 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by DKFZP564K0322, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP564K0322 BINDING SITE, designated SEQ ID:5804, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59923] Another function of GAM8358 is therefore inhibition of DKFZP564K0322 (Accession NP_114429.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and

treatment of diseases and clinical conditions associated with DKFZP564K0322.

[59924] DKFZP564O043 (Accession NP_064715.1) is another GAM8358 target gene, herein designated TARGET GENE. DKFZP564O043 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by DKFZP564O043, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP564O043 BINDING SITE, designated SEQ ID:15465, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59925] Another function of GAM8358 is therefore inhibition of DKFZP564O043 (Accession NP_064715.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZP564O043.

[59926] DKFZP566C0424 (Accession NP_056424.1) is another GAM8358 target gene, herein designated TARGET GENE. DKFZP566C0424 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZP566C0424, corresponding to a target binding site

such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP566C0424 BINDING SITE, designated SEQ ID:8396, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59927] Another function of GAM8358 is therefore inhibition of DKFZP566C0424 (Accession NP_056424.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZP566C0424.

[59928] DKFZP727G051 (Accession XP_045308.2) is another GAM8358 target gene, herein designated TARGET GENE. DKFZP727G051 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZP727G051, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP727G051 BINDING SITE, designated SEQ ID:6607, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59929] Another function of GAM8358 is therefore inhibition of

DKFZP727G051 (Accession XP_045308.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZP727G051.

[59930] DKFZp761B0514 (Accession NP_115665.1) is another GAM8358 target gene, herein designated TARGET GENE. DKFZp761B0514 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZp761B0514, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp761B0514 BINDING SITE, designated SEQ ID:3724, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59931] Another function of GAM8358 is therefore inhibition of DKFZp761B0514 (Accession NP_115665.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp761B0514.

[59932] DKFZp761E1217 (Accession NP_848634.1) is another GAM8358 target gene, herein designated TARGET GENE. DKFZp761E1217 BINDING SITE is a target binding site

found in the 3` untranslated region of mRNA encoded by DKFZp761E1217, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp761E1217 BINDING SITE, designated SEQ ID:1697, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59933] Another function of GAM8358 is therefore inhibition of DKFZp761E1217 (Accession NP_848634.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp761E1217.

[59934] DKFZp761H2121 (Accession NP_612212.1) is another GAM8358 target gene, herein designated TARGET GENE. DKFZp761H2121 BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by DKFZp761H2121, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp761H2121 BINDING SITE, designated SEQ ID:7508, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also design-

nated SEQ ID:255.

[59935] Another function of GAM8358 is therefore inhibition of DKFZp761H2121 (Accession NP_612212.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp761H2121.

[59936] DKFZp761K1423 (Accession NP_060892.1) is another GAM8358 target gene, herein designated TARGET GENE. DKFZp761K1423 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZp761K1423, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp761K1423 BINDING SITE, designated SEQ ID:1386, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59937] Another function of GAM8358 is therefore inhibition of DKFZp761K1423 (Accession NP_060892.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp761K1423.

[59938] Dystrophin myotonia-protein kinase (DMPK, Accession

NP_004400.3) is another GAM8358 target gene, herein designated TARGET GENE. DMPK BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by DMPK, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DMPK BINDING SITE, designated SEQ ID:2249, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59939] Another function of GAM8358 is therefore inhibition of Dystrophin myotonia-protein kinase (DMPK, Accession NP_004400.3) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DMPK.

[59940] Doublesex and mab-3 related transcription factor 2 (DMRT2, Accession NP_006548.1) is another GAM8358 target gene, herein designated TARGET GENE. DMRT2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DMRT2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

DMRT2 BINDING SITE, designated SEQ ID:2892, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59941] Another function of GAM8358 is therefore inhibition of Doublesex and mab-3 related transcription factor 2 (DMRT2, Accession NP_006548.1), a gene which May be involved in male sexual development. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DMRT2.

[59942] The function of DMRT2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM439.1.Dnaj (hsp40) homolog, subfamily b, member 2 (DNAJB2, Accession NP_006727.2) is another GAM8358 target gene, herein designated TARGET GENE. DNAJB2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DNAJB2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DNAJB2 BINDING SITE, designated SEQ ID:960, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59943] Another function of GAM8358 is therefore inhibition of Dnaj (hsp40) homolog, subfamily b, member 2 (DNAJB2, Accession NP_006727.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DNAJB2.

[59944] Dnaj (hsp40) homolog, subfamily c, member 8 (DNAJC8, Accession NP_055095.1) is another GAM8358 target gene, herein designated TARGET GENE. DNAJC8 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DNAJC8, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DNAJC8 BINDING SITE, designated SEQ ID:9424, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59945] Another function of GAM8358 is therefore inhibition of Dnaj (hsp40) homolog, subfamily c, member 8 (DNAJC8, Accession NP_055095.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DNAJC8.

[59946] Dna (cytosine-5-)-methyltransferase 2 (DNMT2, Accession NP_788274.1) is another GAM8358 target gene,

herein designated TARGET GENE. DNMT2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by DNMT2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DNMT2 BINDING SITE, designated SEQ ID:5113, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59947] Another function of GAM8358 is therefore inhibition of Dna (cytosine-5-)-methyltransferase 2 (DNMT2, Accession NP_788274.1), a gene which may mark specific sequences in the genome . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DNMT2.

[59948] The function of DNMT2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM264.1.Dna (cytosine-5-)-methyltransferase 2 (DNMT2, Accession NP_004403.1) is another GAM8358 target gene, herein designated TARGET GENE. DNMT2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded

by DNMT2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DNMT2 BINDING SITE, designated SEQ ID:5113, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59949] Another function of GAM8358 is therefore inhibition of Dna (cytosine-5-)-methyltransferase 2 (DNMT2, Accession NP_004403.1), a gene which may mark specific sequences in the genome . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DNMT2.

[59950] The function of DNMT2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM264.1.Dna (cytosine-5-)-methyltransferase 2 (DNMT2, Accession NP_788270.1) is another GAM8358 target gene, herein designated TARGET GENE. DNMT2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by DNMT2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DNMT2 BINDING SITE, designated SEQ ID:5113, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59951] Another function of GAM8358 is therefore inhibition of Dna (cytosine-5-)-methyltransferase 2 (DNMT2, Accession NP_788270.1), a gene which may mark specific sequences in the genome . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DNMT2.

[59952] The function of DNMT2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM264.1.Dna (cytosine-5-)-methyltransferase 2 (DNMT2, Accession NP_788271.1) is another GAM8358 target gene, herein designated TARGET GENE. DNMT2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by DNMT2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DNMT2 BINDING SITE, designated

SEQ ID:5113, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59953] Another function of GAM8358 is therefore inhibition of Dna (cytosine-5-)-methyltransferase 2 (DNMT2, Accession NP_788271.1), a gene which may mark specific sequences in the genome . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DNMT2.

[59954] The function of DNMT2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM264.1.Dna (cytosine-5-)-methyltransferase 2 (DNMT2, Accession NP_788272.1) is another GAM8358 target gene, herein designated TARGET GENE. DNMT2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by DNMT2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DNMT2 BINDING SITE, designated SEQ ID:5113, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ

ID:255.

[59955] Another function of GAM8358 is therefore inhibition of Dna (cytosine-5-)-methyltransferase 2 (DNMT2, Accession NP_788272.1), a gene which may mark specific sequences in the genome . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DNMT2.

[59956] The function of DNMT2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM264.1.Dna (cytosine-5-)-methyltransferase 2 (DNMT2, Accession NP_788273.1) is another GAM8358 target gene, herein designated TARGET GENE. DNMT2 BINDING SITE is a target binding site found in the 3` untranslated region of multiple transcripts of mRNA encoded by DNMT2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DNMT2 BINDING SITE, designated SEQ ID:5113, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59957] Another function of GAM8358 is therefore inhibition of

Dna (cytosine-5-)-methyltransferase 2 (DNMT2, Accession NP_788273.1), a gene which may mark specific sequences in the genome . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DNMT2.

[59958] The function of DNMT2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM264.1.DPF3 (Accession NP_036206.1) is another GAM8358 target gene, herein designated TARGET GENE. DPF3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DPF3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DPF3 BINDING SITE, designated SEQ ID:15008, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59959] Another function of GAM8358 is therefore inhibition of DPF3 (Accession NP_036206.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DPF3.

[59960] Diphtheria toxin resistance protein required for diph-

thamide biosynthesis-like 2 (*s. cerevisiae*) (DPH2L2, Accession NP_001375.2) is another GAM8358 target gene, herein designated TARGET GENE. DPH2L2 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by DPH2L2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DPH2L2 BINDING SITE, designated SEQ ID:14115, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59961] Another function of GAM8358 is therefore inhibition of Diphtheria toxin resistance protein required for diphthamide biosynthesis-like 2 (*s. cerevisiae*) (DPH2L2, Accession NP_001375.2), a gene which is required for diphthamide biosynthesis. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DPH2L2.

[59962] The function of DPH2L2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM673.1. Dopamine receptor d5 (DRD5, Accession NP_000789.1) is another GAM8358 target gene, herein

designated TARGET GENE. DRD5 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DRD5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DRD5 BINDING SITE, designated SEQ ID:14601, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59963] Another function of GAM8358 is therefore inhibition of Dopamine receptor d5 (DRD5, Accession NP_000789.1), a gene which is a dopamine receptor. and therefore may be associated with Primary cervical dystonia and schizophrenia. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of Primary cervical dystonia and schizophrenia, and of other diseases and clinical conditions associated with DRD5.

[59964] The function of DRD5 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM1571.1. Down syndrome critical region gene 6 (DSCR6, Accession NP_061835.1) is another GAM8358 target gene, herein designated TARGET GENE. DSCR6

BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DSCR6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DSCR6 BINDING SITE, designated SEQ ID:3793, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59965] Another function of GAM8358 is therefore inhibition of Down syndrome critical region gene 6 (DSCR6, Accession NP_061835.1). Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DSCR6.

[59966] DT1P1A10 (Accession NP_477511.1) is another GAM8358 target gene, herein designated TARGET GENE. DT1P1A10 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DT1P1A10, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DT1P1A10 BINDING SITE, designated SEQ ID:15919, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59967] Another function of GAM8358 is therefore inhibition of DT1P1A10 (Accession NP_477511.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DT1P1A10.

[59968] Dishevelled, dsh homolog 3 (drosophila) (DVL3, Accession NP_004414.2) is another GAM8358 target gene, herein designated TARGET GENE. DVL3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DVL3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DVL3 BINDING SITE, designated SEQ ID:10388, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59969] Another function of GAM8358 is therefore inhibition of Dishevelled, dsh homolog 3 (drosophila) (DVL3, Accession NP_004414.2), a gene which regulates cell proliferation. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DVL3.

[59970] The function of DVL3 and its association with various dis-

eases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM47.1.E2IG4 (Accession NP_056331.1) is another GAM8358 target gene, herein designated TARGET GENE. E2IG4 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by E2IG4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of E2IG4 BINDING SITE, designated SEQ ID:5803, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59971] Another function of GAM8358 is therefore inhibition of E2IG4 (Accession NP_056331.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with E2IG4.

[59972] EB-1 (Accession NP_690001.1) is another GAM8358 target gene, herein designated TARGET GENE. EB-1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by EB-1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide se-

quences of EB-1 BINDING SITE, designated SEQ ID:571, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59973] Another function of GAM8358 is therefore inhibition of EB-1 (Accession NP_690001.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with EB-1.

[59974] EDEM (Accession NP_055489.1) is another GAM8358 target gene, herein designated TARGET GENE. EDEM BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by EDEM, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of EDEM BINDING SITE, designated SEQ ID:3301, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59975] Another function of GAM8358 is therefore inhibition of EDEM (Accession NP_055489.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with EDEM.

[59976] Eukaryotic translation initiation factor 2b, subunit 5 epsilon, 82kda (EIF2B5, Accession XP_291076.1) is another

GAM8358 target gene, herein designated TARGET GENE. EIF2B5 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by EIF2B5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of EIF2B5 BINDING SITE, designated SEQ ID:6190, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59977] Another function of GAM8358 is therefore inhibition of Eukaryotic translation initiation factor 2b, subunit 5 epsilon, 82kda (EIF2B5, Accession XP_291076.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with EIF2B5.

[59978] Ectonucleoside triphosphate diphosphohydrolase 6 (putative function) (ENTPD6, Accession NP_001238.1) is another GAM8358 target gene, herein designated TARGET GENE. ENTPD6 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ENTPD6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of ENTPD6 BINDING SITE, designated SEQ ID:10345, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59979] Another function of GAM8358 is therefore inhibition of Ectonucleoside triphosphate diphosphohydrolase 6 (putative function) (ENTPD6, Accession NP_001238.1), a gene which might support glycosylation reactions in the golgi apparatus and, when released from cells, might catalyze the hydrolysis of extracellular nucleotides. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ENTPD6.

[59980] The function of ENTPD6 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM65.2.Ephb4 (EPHB4, Accession NP_004435.2) is another GAM8358 target gene, herein designated TARGET GENE. EPHB4 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by EPHB4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide se-

quences of EPHB4 BINDING SITE, designated SEQ ID:1248, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59981] Another function of GAM8358 is therefore inhibition of Ephb4 (EPHB4, Accession NP_004435.2), a gene which receptor for members of the ephrin- b family. binds to ephrin- b2. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with EPHB4.

[59982] The function of EPHB4 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM767.1.ERAP140 (Accession XP_059748.2) is another GAM8358 target gene, herein designated TARGET GENE. ERAP140 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ERAP140, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ERAP140 BINDING SITE, designated SEQ ID:5927, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59983] Another function of GAM8358 is therefore inhibition of ERAP140 (Accession XP_059748.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ERAP140.

[59984] Envoplakin (EVPL, Accession NP_001979.1) is another GAM8358 target gene, herein designated TARGET GENE. EVPL BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by EVPL, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of EVPL BINDING SITE, designated SEQ ID:6608, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59985] Another function of GAM8358 is therefore inhibition of Envoplakin (EVPL, Accession NP_001979.1), a gene which a membrane-associated protein . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with EVPL.

[59986] The function of EVPL and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM869.1.FBXW5 (Accession NP_839891.1) is another GAM8358 target gene, herein designated TARGET GENE. FBXW5 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by FBXW5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FBXW5 BINDING SITE, designated SEQ ID:13135, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59987] Another function of GAM8358 is therefore inhibition of FBXW5 (Accession NP_839891.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FBXW5.

[59988] FLJ00001 (Accession XP_088525.2) is another GAM8358 target gene, herein designated TARGET GENE. FLJ00001 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ00001, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ00001 BINDING SITE, designated SEQ ID:19793, to the

nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59989] Another function of GAM8358 is therefore inhibition of FLJ00001 (Accession XP_088525.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ00001.

[59990] FLJ10346 (Accession NP_060535.1) is another GAM8358 target gene, herein designated TARGET GENE. FLJ10346 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FLJ10346, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ10346 BINDING SITE, designated SEQ ID:14374, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59991] Another function of GAM8358 is therefore inhibition of FLJ10346 (Accession NP_060535.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ10346.

[59992] FLJ10539 (Accession NP_060600.1) is another GAM8358

target gene, herein designated TARGET GENE. FLJ10539 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ10539, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ10539 BINDING SITE, designated SEQ ID:11608, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59993] Another function of GAM8358 is therefore inhibition of FLJ10539 (Accession NP_060600.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ10539.

[59994] FLJ10980 (Accession XP_035527.2) is another GAM8358 target gene, herein designated TARGET GENE. FLJ10980 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ10980, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ10980 BINDING SITE, designated SEQ ID:6098, to the nucleotide sequence of GAM8358 RNA, herein designated

GAM RNA, also designated SEQ ID:255.

[59995] Another function of GAM8358 is therefore inhibition of FLJ10980 (Accession XP_035527.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ10980.

[59996] FLJ11783 (Accession NP_079167.1) is another GAM8358 target gene, herein designated TARGET GENE. FLJ11783 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FLJ11783, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ11783 BINDING SITE, designated SEQ ID:6450, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59997] Another function of GAM8358 is therefore inhibition of FLJ11783 (Accession NP_079167.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ11783.

[59998] FLJ12076 (Accession NP_079463.2) is another GAM8358 target gene, herein designated TARGET GENE. FLJ12076

BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ12076, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ12076 BINDING SITE, designated SEQ ID:1230, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[59999] Another function of GAM8358 is therefore inhibition of FLJ12076 (Accession NP_079463.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ12076.

[60000] FLJ12547 (Accession NP_079268.1) is another GAM8358 target gene, herein designated TARGET GENE. FLJ12547 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ12547, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ12547 BINDING SITE, designated SEQ ID:19280, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60001] Another function of GAM8358 is therefore inhibition of FLJ12547 (Accession NP_079268.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ12547.

[60002] FLJ12687 (Accession NP_079193.2) is another GAM8358 target gene, herein designated TARGET GENE. FLJ12687 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FLJ12687, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ12687 BINDING SITE, designated SEQ ID:3627, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60003] Another function of GAM8358 is therefore inhibition of FLJ12687 (Accession NP_079193.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ12687.

[60004] FLJ12800 (Accession NP_075054.1) is another GAM8358 target gene, herein designated TARGET GENE. FLJ12800 BINDING SITE1 through FLJ12800 BINDING SITE3 are target

binding sites found in untranslated regions of mRNA encoded by FLJ12800, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ12800 BINDING SITE1 through FLJ12800 BINDING SITE3, designated SEQ ID:14600, SEQ ID:10088 and SEQ ID:7968 respectively, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60005] Another function of GAM8358 is therefore inhibition of FLJ12800 (Accession NP_075054.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ12800.

[60006] FLJ12875 (Accession NP_078820.1) is another GAM8358 target gene, herein designated TARGET GENE. FLJ12875 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ12875, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ12875 BINDING SITE, designated SEQ ID:12746, to the nucleotide sequence of GAM8358 RNA, herein designated

GAM RNA, also designated SEQ ID:255.

[60007] Another function of GAM8358 is therefore inhibition of FLJ12875 (Accession NP_078820.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ12875.

[60008] FLJ12985 (Accession NP_079200.1) is another GAM8358 target gene, herein designated TARGET GENE. FLJ12985 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ12985, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ12985 BINDING SITE, designated SEQ ID:4980, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60009] Another function of GAM8358 is therefore inhibition of FLJ12985 (Accession NP_079200.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ12985.

[60010] FLJ13072 (Accession XP_117117.2) is another GAM8358 target gene, herein designated TARGET GENE. FLJ13072

BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ13072, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ13072 BINDING SITE, designated SEQ ID:14989, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60011] Another function of GAM8358 is therefore inhibition of FLJ13072 (Accession XP_117117.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ13072.

[60012] FLJ13197 (Accession NP_078890.1) is another GAM8358 target gene, herein designated TARGET GENE. FLJ13197 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ13197, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ13197 BINDING SITE, designated SEQ ID:7714, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60013] Another function of GAM8358 is therefore inhibition of FLJ13197 (Accession NP_078890.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ13197.

[60014] FLJ13639 (Accession NP_078981.1) is another GAM8358 target gene, herein designated TARGET GENE. FLJ13639 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ13639, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ13639 BINDING SITE, designated SEQ ID:9712, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60015] Another function of GAM8358 is therefore inhibition of FLJ13639 (Accession NP_078981.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ13639.

[60016] FLJ13848 (Accession NP_079047.1) is another GAM8358 target gene, herein designated TARGET GENE. FLJ13848 BINDING SITE is a target binding site found in the 3' un-

translated region of mRNA encoded by FLJ13848, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ13848 BINDING SITE, designated SEQ ID:8727, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60017] Another function of GAM8358 is therefore inhibition of FLJ13848 (Accession NP_079047.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ13848.

[60018] FLJ13852 (Accession NP_075566.1) is another GAM8358 target gene, herein designated TARGET GENE. FLJ13852 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ13852, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ13852 BINDING SITE, designated SEQ ID:1028, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60019] Another function of GAM8358 is therefore inhibition of

FLJ13852 (Accession NP_075566.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ13852.

[60020] FLJ14399 (Accession NP_116169.2) is another GAM8358 target gene, herein designated TARGET GENE. FLJ14399 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ14399, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ14399 BINDING SITE, designated SEQ ID:15886, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60021] Another function of GAM8358 is therefore inhibition of FLJ14399 (Accession NP_116169.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ14399.

[60022] FLJ14816 (Accession NP_116234.1) is another GAM8358 target gene, herein designated TARGET GENE. FLJ14816 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ14816, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ14816 BINDING SITE, designated SEQ ID:3978, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60023] Another function of GAM8358 is therefore inhibition of FLJ14816 (Accession NP_116234.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ14816.

[60024] FLJ20232 (Accession NP_061881.2) is another GAM8358 target gene, herein designated TARGET GENE. FLJ20232 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ20232, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20232 BINDING SITE, designated SEQ ID:17239, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60025] Another function of GAM8358 is therefore inhibition of FLJ20232 (Accession NP_061881.2) . Accordingly, utilities

of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20232.

[60026] FLJ20300 (Accession NP_060223.1) is another GAM8358 target gene, herein designated TARGET GENE. FLJ20300 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ20300, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20300 BINDING SITE, designated SEQ ID:10271, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60027] Another function of GAM8358 is therefore inhibition of FLJ20300 (Accession NP_060223.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20300.

[60028] FLJ20303 (Accession NP_060225.2) is another GAM8358 target gene, herein designated TARGET GENE. FLJ20303 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FLJ20303, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20303 BINDING SITE, designated SEQ ID:952, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60029] Another function of GAM8358 is therefore inhibition of FLJ20303 (Accession NP_060225.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20303.

[60030] FLJ20508 (Accession NP_060320.1) is another GAM8358 target gene, herein designated TARGET GENE. FLJ20508 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ20508, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20508 BINDING SITE, designated SEQ ID:2977, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60031] Another function of GAM8358 is therefore inhibition of FLJ20508 (Accession NP_060320.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment

of diseases and clinical conditions associated with FLJ20508.

[60032] FLJ20511 (Accession NP_060323.1) is another GAM8358 target gene, herein designated TARGET GENE. FLJ20511 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ20511, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20511 BINDING SITE, designated SEQ ID:11948, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60033] Another function of GAM8358 is therefore inhibition of FLJ20511 (Accession NP_060323.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20511.

[60034] FLJ20802 (Accession NP_060429.1) is another GAM8358 target gene, herein designated TARGET GENE. FLJ20802 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FLJ20802, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of FLJ20802 BINDING SITE, designated SEQ ID:19763, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60035] Another function of GAM8358 is therefore inhibition of FLJ20802 (Accession NP_060429.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20802.

[60036] FLJ21438 (Accession XP_029084.5) is another GAM8358 target gene, herein designated TARGET GENE. FLJ21438 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ21438, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ21438 BINDING SITE, designated SEQ ID:7158, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60037] Another function of GAM8358 is therefore inhibition of FLJ21438 (Accession XP_029084.5) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

FLJ21438.

[60038] FLJ23231 (Accession NP_079355.1) is another GAM8358 target gene, herein designated TARGET GENE. FLJ23231 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ23231, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ23231 BINDING SITE, designated SEQ ID:3342, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60039] Another function of GAM8358 is therefore inhibition of FLJ23231 (Accession NP_079355.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ23231.

[60040] FLJ23322 (Accession NP_079231.3) is another GAM8358 target gene, herein designated TARGET GENE. FLJ23322 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ23322, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

FLJ23322 BINDING SITE, designated SEQ ID:14095, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60041] Another function of GAM8358 is therefore inhibition of FLJ23322 (Accession NP_079231.3) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ23322.

[60042] FLJ25371 (Accession NP_689756.1) is another GAM8358 target gene, herein designated TARGET GENE. FLJ25371 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ25371, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ25371 BINDING SITE, designated SEQ ID:18933, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60043] Another function of GAM8358 is therefore inhibition of FLJ25371 (Accession NP_689756.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ25371.

[60044] FLJ30313 (Accession NP_689970.1) is another GAM8358 target gene, herein designated TARGET GENE. FLJ30313 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ30313, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ30313 BINDING SITE, designated SEQ ID:5561, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60045] Another function of GAM8358 is therefore inhibition of FLJ30313 (Accession NP_689970.1). Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ30313.

[60046] FLJ30634 (Accession NP_694559.1) is another GAM8358 target gene, herein designated TARGET GENE. FLJ30634 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ30634, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ30634 BINDING SITE, designated SEQ ID:3937, to the

nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60047] Another function of GAM8358 is therefore inhibition of FLJ30634 (Accession NP_694559.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ30634.

[60048] FLJ31715 (Accession NP_689745.1) is another GAM8358 target gene, herein designated TARGET GENE. FLJ31715 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ31715, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ31715 BINDING SITE, designated SEQ ID:15771, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60049] Another function of GAM8358 is therefore inhibition of FLJ31715 (Accession NP_689745.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ31715.

[60050] FLJ31958 (Accession NP_694575.1) is another GAM8358

target gene, herein designated TARGET GENE. FLJ31958 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ31958, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ31958 BINDING SITE, designated SEQ ID:17080, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60051] Another function of GAM8358 is therefore inhibition of FLJ31958 (Accession NP_694575.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ31958.

[60052] FLJ32334 (Accession NP_653166.1) is another GAM8358 target gene, herein designated TARGET GENE. FLJ32334 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ32334, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ32334 BINDING SITE, designated SEQ ID:18443, to the nucleotide sequence of GAM8358 RNA, herein designated

GAM RNA, also designated SEQ ID:255.

[60053] Another function of GAM8358 is therefore inhibition of FLJ32334 (Accession NP_653166.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ32334.

[60054] FLJ32796 (Accession NP_705834.1) is another GAM8358 target gene, herein designated TARGET GENE. FLJ32796 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FLJ32796, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ32796 BINDING SITE, designated SEQ ID:6527, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60055] Another function of GAM8358 is therefore inhibition of FLJ32796 (Accession NP_705834.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ32796.

[60056] FLJ36666 (Accession NP_689695.1) is another GAM8358 target gene, herein designated TARGET GENE. FLJ36666

BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ36666, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ36666 BINDING SITE, designated SEQ ID:19178, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60057] Another function of GAM8358 is therefore inhibition of FLJ36666 (Accession NP_689695.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ36666.

[60058] Fibromodulin (FMOD, Accession NP_002014.1) is another GAM8358 target gene, herein designated TARGET GENE. FMOD BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FMOD, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FMOD BINDING SITE, designated SEQ ID:1281, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60059] Another function of GAM8358 is therefore inhibition of Fibromodulin (FMOD, Accession NP_002014.1), a gene which affects the rate of fibrils formation. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FMOD.

[60060] The function of FMOD and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM369.1. Forkhead box o1a (rhabdomyosarcoma) (FOXO1A, Accession NP_002006.2) is another GAM8358 target gene, herein designated TARGET GENE. FOXO1A BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FOXO1A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FOXO1A BINDING SITE, designated SEQ ID:4341, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60061] Another function of GAM8358 is therefore inhibition of Forkhead box o1a (rhabdomyosarcoma) (FOXO1A, Accession NP_002006.2), a gene which is a probable transcrip-

tion factor. and therefore may be associated with Alveolar rhabdomyosarcoma- 2. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of Alveolar rhabdomyosarcoma- 2., and of other diseases and clinical conditions associated with FOXO1A.

[60062] The function of FOXO1A and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM189.1.Fucosyltransferase 6 (alpha (1,3) fucosyltransferase) (FUT6, Accession NP_000141.1) is another GAM8358 target gene, herein designated TARGET GENE. FUT6 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FUT6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FUT6 BINDING SITE, designated SEQ ID:5232, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60063] Another function of GAM8358 is therefore inhibition of Fucosyltransferase 6 (alpha (1,3) fucosyltransferase) (FUT6, Accession NP_000141.1), a gene which is involved in the biosynthesis of the e- selectin ligand, sialyl- lewis

x. catalyzes the transfer of fucose from gdp- beta- fucose to alpha- 2,3 sialylated substrates. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FUT6.

[60064] The function of FUT6 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM47.1. Gamma-aminobutyric acid (gaba) b receptor, 1 (GABBR1, Accession NP_068703.1) is another GAM8358 target gene, herein designated TARGET GENE. GABBR1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by GABBR1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GABBR1 BINDING SITE, designated SEQ ID:7815, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60065] Another function of GAM8358 is therefore inhibition of Gamma-aminobutyric acid (gaba) b receptor, 1 (GABBR1, Accession NP_068703.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of

diseases and clinical conditions associated with GABBR1.

[60066] Gamma-aminobutyric acid (gaba) b receptor, 1 (GABBR1, Accession NP_001461.1) is another GAM8358 target gene, herein designated TARGET GENE. GABBR1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by GABBR1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GABBR1 BINDING SITE, designated SEQ ID:7815, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60067] Another function of GAM8358 is therefore inhibition of Gamma-aminobutyric acid (gaba) b receptor, 1 (GABBR1, Accession NP_001461.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GABBR1.

[60068] Gamma-aminobutyric acid (gaba) b receptor, 1 (GABBR1, Accession NP_068704.1) is another GAM8358 target gene, herein designated TARGET GENE. GABBR1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by GABBR1, corresponding to a target binding site such as BINDING SITE

I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GABBR1 BINDING SITE, designated SEQ ID:7815, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60069] Another function of GAM8358 is therefore inhibition of Gamma-aminobutyric acid (gaba) b receptor, 1 (GABBR1, Accession NP_068704.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GABBR1.

[60070] Gamma-aminobutyric acid (gaba) b receptor, 1 (GABBR1, Accession NP_068705.1) is another GAM8358 target gene, herein designated TARGET GENE. GABBR1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by GABBR1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GABBR1 BINDING SITE, designated SEQ ID:7815, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60071] Another function of GAM8358 is therefore inhibition of Gamma-aminobutyric acid (gaba) b receptor, 1 (GABBR1,

Accession NP_068705.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GABBR1.

[60072] GAC1 (Accession NP_006329.1) is another GAM8358 target gene, herein designated TARGET GENE. GAC1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GAC1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GAC1 BINDING SITE, designated SEQ ID:18086, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60073] Another function of GAM8358 is therefore inhibition of GAC1 (Accession NP_006329.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GAC1.

[60074] GAL3ST2 (Accession NP_149025.1) is another GAM8358 target gene, herein designated TARGET GENE. GAL3ST2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GAL3ST2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of GAL3ST2 BINDING SITE, designated SEQ ID:19391, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60075] Another function of GAM8358 is therefore inhibition of GAL3ST2 (Accession NP_149025.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GAL3ST2.

[60076] GALNAC4S-6ST (Accession NP_055678.1) is another GAM8358 target gene, herein designated TARGET GENE. GALNAC4S-6ST BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by GALNAC4S-6ST, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GALNAC4S-6ST BINDING SITE, designated SEQ ID:14898, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60077] Another function of GAM8358 is therefore inhibition of GALNAC4S-6ST (Accession NP_055678.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and

treatment of diseases and clinical conditions associated with GALNAC4S-6ST.

[60078] GALNAC4S-6ST (Accession NP_056976.1) is another GAM8358 target gene, herein designated TARGET GENE. GALNAC4S-6ST BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by GALNAC4S-6ST, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GALNAC4S-6ST BINDING SITE, designated SEQ ID:14898, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60079] Another function of GAM8358 is therefore inhibition of GALNAC4S-6ST (Accession NP_056976.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GALNAC4S-6ST.

[60080] Udp-n-acetyl-alpha-d-galactosamine:polypeptide n-acetylgalactosaminyltransferase 3 (galnac-t3) (GALNT3, Accession NP_004473.1) is another GAM8358 target gene, herein designated TARGET GENE. GALNT3 BINDING SITE is a target binding site found in the 3' untranslated region

of mRNA encoded by GALNT3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GALNT3 BINDING SITE, designated SEQ ID:1308, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60081] Another function of GAM8358 is therefore inhibition of Udp-n-acetyl-alpha-d-galactosamine:polypeptide n-acetylgalactosaminyltransferase 3 (galnac-t3) (GALNT3, Accession NP_004473.1), a gene which initiates O- glycosylation of serine and threonine residues. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GALNT3.

[60082] The function of GALNT3 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM72.1. Glycoprotein a repetitions predominant (GARP, Accession NP_005503.1) is another GAM8358 target gene, herein designated TARGET GENE. GARP BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GARP, corresponding to a

target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GARP BINDING SITE, designated SEQ ID:18213, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60083] Another function of GAM8358 is therefore inhibition of Glycoprotein a repetitions predominant (GARP, Accession NP_005503.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GARP.

[60084] Gata binding protein 4 (GATA4, Accession NP_002043.1) is another GAM8358 target gene, herein designated TARGET GENE. GATA4 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GATA4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GATA4 BINDING SITE, designated SEQ ID:17802, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60085] Another function of GAM8358 is therefore inhibition of

Gata binding protein 4 (GATA4, Accession NP_002043.1), a gene which regulates genes critical for myocardial differentiation and function. and therefore may be associated with Cardiac hypertrophy and sex cord- derived ovarian tumors. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of Cardiac hypertrophy and sex cord- derived ovarian tumors., and of other diseases and clinical conditions associated with GATA4.

[60086] The function of GATA4 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM63.1.Gtp cyclohydrolase i feedback regulatory protein (GCHFR, Accession NP_005249.1) is another GAM8358 target gene, herein designated TARGET GENE. GCHFR BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GCHFR, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GCHFR BINDING SITE, designated SEQ ID:18283, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60087] Another function of GAM8358 is therefore inhibition of

Gtp cyclohydrolase i feedback regulatory protein (GCHFR, Accession NP_005249.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GCHFR.

[60088] Gamma-glutamyltransferase 1 (GGT1, Accession NP_005256.1) is another GAM8358 target gene, herein designated TARGET GENE. GGT1 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by GGT1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GGT1 BINDING SITE, designated SEQ ID:5411, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60089] Another function of GAM8358 is therefore inhibition of Gamma-glutamyltransferase 1 (GGT1, Accession NP_005256.1), a gene which catalyzes the transfer of the glutamyl moiety of glutathione to a variety of amino acids and dipeptide acceptors and therefore is associated with Glutathionuria. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of Glutathionuria, and of other diseases and clinical conditions associated

with GGT1.

[60090] The function of GGT1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM234.1. Gamma-glutamyltransferase 1 (GGT1, Accession NP_038265.1) is another GAM8358 target gene, herein designated TARGET GENE. GGT1 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by GGT1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GGT1 BINDING SITE, designated SEQ ID:5411, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60091] Another function of GAM8358 is therefore inhibition of Gamma-glutamyltransferase 1 (GGT1, Accession NP_038265.1), a gene which catalyzes the transfer of the glutamyl moiety of glutathione to a variety of amino acids and dipeptide acceptors and therefore is associated with Glutathionuria. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of Glutathionuria, and of other diseases and clinical conditions associated

with GGT1.

[60092] The function of GGT1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM234.1. Gamma-glutamyltransferase 1 (GGT1, Accession NP_038347.1) is another GAM8358 target gene, herein designated TARGET GENE. GGT1 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by GGT1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GGT1 BINDING SITE, designated SEQ ID:5411, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60093] Another function of GAM8358 is therefore inhibition of Gamma-glutamyltransferase 1 (GGT1, Accession NP_038347.1), a gene which catalyzes the transfer of the glutamyl moiety of glutathione to a variety of amino acids and dipeptide acceptors and therefore is associated with Glutathionuria. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of Glutathionuria, and of other diseases and clinical conditions associated

with GGT1.

[60094] The function of GGT1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM234.1. Gamma-glutamyltransferase 2 (GGT2, Accession XP_290331.1) is another GAM8358 target gene, herein designated TARGET GENE. GGT2 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by GGT2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GGT2 BINDING SITE, designated SEQ ID:5411, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60095] Another function of GAM8358 is therefore inhibition of Gamma-glutamyltransferase 2 (GGT2, Accession XP_290331.1). Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GGT2.

[60096] G protein-coupled receptor kinase-interactor 1 (GIT1, Accession NP_054749.1) is another GAM8358 target gene, herein designated TARGET GENE. GIT1 BINDING SITE is a

target binding site found in the 3' untranslated region of mRNA encoded by GIT1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GIT1 BINDING SITE, designated SEQ ID:599, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60097] Another function of GAM8358 is therefore inhibition of G protein-coupled receptor kinase-interactor 1 (GIT1, Accession NP_054749.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GIT1.

[60098] G protein pathway suppressor 2 (GPS2, Accession NP_004480.1) is another GAM8358 target gene, herein designated TARGET GENE. GPS2 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by GPS2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GPS2 BINDING SITE, designated SEQ ID:16530, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA,

also designated SEQ ID:255.

[60099] Another function of GAM8358 is therefore inhibition of G protein pathway suppressor 2 (GPS2, Accession NP_004480.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GPS2.

[60100] Glutamate receptor, metabotropic 4 (GRM4, Accession NP_000832.1) is another GAM8358 target gene, herein designated TARGET GENE. GRM4 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GRM4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GRM4 BINDING SITE, designated SEQ ID:1955, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60101] Another function of GAM8358 is therefore inhibition of Glutamate receptor, metabotropic 4 (GRM4, Accession NP_000832.1), a gene which is mediated by a g- protein that inhibits adenylate cyclase activity. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

GRM4.

[60102] The function of GRM4 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM223.1. General transcription factor *ie*, polypeptide 1, alpha 56kda (GTF2E1, Accession NP_005504.1) is another GAM8358 target gene, herein designated TARGET GENE. GTF2E1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GTF2E1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GTF2E1 BINDING SITE, designated SEQ ID:17008, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60103] Another function of GAM8358 is therefore inhibition of General transcription factor *ie*, polypeptide 1, alpha 56kda (GTF2E1, Accession NP_005504.1). Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GTF2E1.

[60104] Glycophorin b (includes ss blood group) (GYPB, Accession

NP_002091.1) is another GAM8358 target gene, herein designated TARGET GENE. GYPB BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GYPB, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GYPB BINDING SITE, designated SEQ ID:731, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60105] Another function of GAM8358 is therefore inhibition of Glycophorin b (includes ss blood group) (GYPB, Accession NP_002091.1), a gene which is a minor sialoglycoprotein in human erythrocyte membranes and determines the Ss blood group antigens. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GYPB.

[60106] The function of GYPB and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM1095.1. Glycophorin e (GYPE, Accession NP_002093.1) is another GAM8358 target gene, herein designated TARGET GENE. GYPE BINDING SITE is a target binding site found in the 3' untranslated region of mRNA

encoded by GYPE, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GYPE BINDING SITE, designated SEQ ID:14090, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60107] Another function of GAM8358 is therefore inhibition of Glycophorin e (GYPE, Accession NP_002093.1), a gene which is a minor sialoglycoprotein in human erythrocyte membranes. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GYPE.

[60108] The function of GYPE and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM1361.1.Huntingtin (huntington disease) (HD, Accession NP_002102.2) is another GAM8358 target gene, herein designated TARGET GENE. HD BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HD, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of

the nucleotide sequences of HD BINDING SITE, designated SEQ ID:11900, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60109] Another function of GAM8358 is therefore inhibition of Huntingtin (huntington disease) (HD, Accession NP_002102.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HD.

[60110] HECA (Accession NP_057301.1) is another GAM8358 target gene, herein designated TARGET GENE. HECA BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HECA, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HECA BINDING SITE, designated SEQ ID:2910, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60111] Another function of GAM8358 is therefore inhibition of HECA (Accession NP_057301.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HECA.

[60112] Hematopoietic protein 1 (HEM1, Accession NP_005328.1) is another GAM8358 target gene, herein designated TARGET GENE. HEM1 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by HEM1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HEM1 BINDING SITE, designated SEQ ID:7159, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60113] Another function of GAM8358 is therefore inhibition of Hematopoietic protein 1 (HEM1, Accession NP_005328.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HEM1.

[60114] Hairy/enhancer-of-split related with yrpw motif-like (HEYL, Accession NP_055386.1) is another GAM8358 target gene, herein designated TARGET GENE. HEYL BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HEYL, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HEYL BINDING

SITE, designated SEQ ID:781, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

- [60115] Another function of GAM8358 is therefore inhibition of Hairy/enhancer-of-split related with *yrpw* motif-like (HEYL, Accession NP_055386.1). Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HEYL.
- [60116] *Herv-h* ltr-associating 1 (HHLA1, Accession NP_005703.1) is another GAM8358 target gene, herein designated TARGET GENE. HHLA1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HHLA1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HHLA1 BINDING SITE, designated SEQ ID:11901, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.
- [60117] Another function of GAM8358 is therefore inhibition of *Herv-h* ltr-associating 1 (HHLA1, Accession NP_005703.1), a gene which has unknown function and with low similarity to a region of *S. cerevisiae* WSC4. Ac-

cordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HHLA1.

[60118] The function of HHLA1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM223.1. Major histocompatibility complex, class ii, dr alpha (HLA-DRA, Accession NP_061984.1) is another GAM8358 target gene, herein designated TARGET GENE. HLA-DRA BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HLA-DRA, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HLA-DRA BINDING SITE, designated SEQ ID:9798, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60119] Another function of GAM8358 is therefore inhibition of Major histocompatibility complex, class ii, dr alpha (HLA-DRA, Accession NP_061984.1), a gene which plays a central role in the immune system by presenting peptides derived from extracellular proteins. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment

of diseases and clinical conditions associated with HLA-DRA.

[60120] The function of HLA-DRA and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM969.1.Homeo box c13 (HOXC13, Accession NP_059106.2) is another GAM8358 target gene, herein designated TARGET GENE. HOXC13 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HOXC13, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HOXC13 BINDING SITE, designated SEQ ID:12196, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60121] Another function of GAM8358 is therefore inhibition of Homeo box c13 (HOXC13, Accession NP_059106.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HOXC13.

[60122] Histidine rich calcium binding protein (HRC, Accession NP_002143.1) is another GAM8358 target gene, herein

designated TARGET GENE. HRC BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by HRC, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HRC BINDING SITE, designated SEQ ID:7926, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60123] Another function of GAM8358 is therefore inhibition of Histidine rich calcium binding protein (HRC, Accession NP_002143.1), a gene which is a histidine- rich calcium-binding protein. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HRC.

[60124] The function of HRC and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM1722.1. Histamine receptor h1 (HRH1, Accession NP_000852.1) is another GAM8358 target gene, herein designated TARGET GENE. HRH1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HRH1, corresponding to a target binding site

such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HRH1 BINDING SITE, designated SEQ ID:9207, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60125] Another function of GAM8358 is therefore inhibition of Histamine receptor h1 (HRH1, Accession NP_000852.1), a gene which stimulates the synthesis of inositol phosphate. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HRH1.

[60126] The function of HRH1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM47.1.HRI (Accession NP_055228.2) is another GAM8358 target gene, herein designated TARGET GENE. HRI BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HRI, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HRI BINDING SITE, designated SEQ ID:17628, to the nu-

cleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60127] Another function of GAM8358 is therefore inhibition of HRI (Accession NP_055228.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HRI.

[60128] Heparan sulfate (glucosamine) 3-o-sulfotransferase 3b1 (HS3ST3B1, Accession NP_006032.1) is another GAM8358 target gene, herein designated TARGET GENE. HS3ST3B1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HS3ST3B1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HS3ST3B1 BINDING SITE, designated SEQ ID:16195, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60129] Another function of GAM8358 is therefore inhibition of Heparan sulfate (glucosamine) 3-o-sulfotransferase 3b1 (HS3ST3B1, Accession NP_006032.1), a gene which plays a role in the generation of heparan sulfate proteoglycan. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions

associated with HS3ST3B1.

[60130] The function of HS3ST3B1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM354.1. Hydroxy- Δ^5 -steroid dehydrogenase, 3 β - and steroid Δ^5 -isomerase 2 (HSD3B2, Accession NP_000189.1) is another GAM8358 target gene, herein designated TARGET GENE. HSD3B2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HSD3B2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HSD3B2 BINDING SITE, designated SEQ ID:3135, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60131] Another function of GAM8358 is therefore inhibition of Hydroxy- Δ^5 -steroid dehydrogenase, 3 β - and steroid Δ^5 -isomerase 2 (HSD3B2, Accession NP_000189.1). Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HSD3B2.

[60132] Inhibitor of dna binding 2, dominant negative helix-

loop-helix protein (ID2, Accession NP_002157.1) is another GAM8358 target gene, herein designated TARGET GENE. ID2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ID2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ID2 BINDING SITE, designated SEQ ID:19404, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60133] Another function of GAM8358 is therefore inhibition of Inhibitor of dna binding 2, dominant negative helix-loop-helix protein (ID2, Accession NP_002157.1), a gene which may be an inhibitor of tissue-specific gene expression. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ID2.

[60134] The function of ID2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM475.2. Isocitrate dehydrogenase 3 (nad+) alpha (IDH3A, Accession NP_005521.1) is another GAM8358 target gene, herein designated TARGET GENE. IDH3A

BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by IDH3A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IDH3A BINDING SITE, designated SEQ ID:14914, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60135] Another function of GAM8358 is therefore inhibition of Isocitrate dehydrogenase 3 (nad+) alpha (IDH3A, Accession NP_005521.1), a gene which decarboxylates isocitrate into alpha-ketoglutarate in the TCA cycle. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with IDH3A.

[60136] The function of IDH3A and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM248.1. Interferon (alpha, beta and omega) receptor 2 (IFNAR2, Accession NP_000865.2) is another GAM8358 target gene, herein designated TARGET GENE. IFNAR2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by IFNAR2, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IFNAR2 BINDING SITE, designated SEQ ID:11246, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60137] Another function of GAM8358 is therefore inhibition of Interferon (alpha, beta and omega) receptor 2 (IFNAR2, Accession NP_000865.2), a gene which is a receptor for interferons alpha and beta. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with IFNAR2.

[60138] The function of IFNAR2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1.Immunoglobulin superfamily, member 2 (IGSF2, Accession NP_004249.1) is another GAM8358 target gene, herein designated TARGET GENE. IGSF2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by IGSF2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IGSF2 BIND-

ING SITE, designated SEQ ID:15726, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60139] Another function of GAM8358 is therefore inhibition of Immunoglobulin superfamily, member 2 (IGSF2, Accession NP_004249.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with IGSF2.

[60140] Interleukin 16 (lymphocyte chemoattractant factor) (IL16, Accession NP_757366.1) is another GAM8358 target gene, herein designated TARGET GENE. IL16 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by IL16, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IL16 BINDING SITE, designated SEQ ID:10757, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60141] Another function of GAM8358 is therefore inhibition of Interleukin 16 (lymphocyte chemoattractant factor) (IL16, Accession NP_757366.1), a gene which modulates T- cell activation. Accordingly, utilities of GAM8358 include diag-

nosis, prevention and treatment of diseases and clinical conditions associated with IL16.

[60142] The function of IL16 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM66.1. Interleukin 17c (IL17C, Accession NP_037410.1) is another GAM8358 target gene, herein designated TARGET GENE. IL17C BINDING SITE1 and IL17C BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by IL17C, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IL17C BINDING SITE1 and IL17C BINDING SITE2, designated SEQ ID:15783 and SEQ ID:17730 respectively, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60143] Another function of GAM8358 is therefore inhibition of Interleukin 17c (IL17C, Accession NP_037410.1). Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with IL17C.

[60144] Itchy homolog e3 ubiquitin protein ligase (mouse) (ITCH, Accession NP_113671.3) is another GAM8358 target gene, herein designated TARGET GENE. ITCH BINDING SITE is a

target binding site found in the 3' untranslated region of mRNA encoded by ITCH, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ITCH BINDING SITE, designated SEQ ID:8893, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60145] Another function of GAM8358 is therefore inhibition of Itchy homolog e3 ubiquitin protein ligase (mouse) (ITCH, Accession NP_113671.3), a gene which accepts ubiquitin from an e2 ubiquitin-conjugating enzyme in the form of a thioester and then directly transfers the ubiquitin to targeted substrates. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ITCH.

[60146] The function of ITCH and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM72.1. Inositol 1,4,5-triphosphate receptor, type 2 (ITPR2, Accession NP_002214.1) is another GAM8358 target gene, herein designated TARGET GENE. ITPR2 BINDING SITE is a target binding site found in the 5' untranslated

region of mRNA encoded by ITPR2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ITPR2 BINDING SITE, designated SEQ ID:7682, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60147] Another function of GAM8358 is therefore inhibition of Inositol 1,4,5-triphosphate receptor, type 2 (ITPR2, Accession NP_002214.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ITPR2.

[60148] Jumonji homolog (mouse) (JMJ, Accession NP_004964.2) is another GAM8358 target gene, herein designated TARGET GENE. JMJ BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by JMJ, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of JMJ BINDING SITE, designated SEQ ID:1204, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60149] Another function of GAM8358 is therefore inhibition of

Jumonji homolog (mouse) (JMJ, Accession NP_004964.2), a gene which participates in the negative regulation of cell growth. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with JMJ.

[60150] The function of JMJ and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM47.1. Potassium voltage-gated channel, Isk-related family, member 1-like (KCNE1L, Accession NP_036414.1) is another GAM8358 target gene, herein designated TARGET GENE. KCNE1L BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KCNE1L, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KCNE1L BINDING SITE, designated SEQ ID:5757, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60151] Another function of GAM8358 is therefore inhibition of Potassium voltage-gated channel, Isk-related family, member 1-like (KCNE1L, Accession NP_036414.1), a gene

which is a potassium voltage- gated channel. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KCNE1L.

[60152] The function of KCNE1L and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM223.1.KIAA0193 (Accession NP_055581.2) is another GAM8358 target gene, herein designated TARGET GENE. KIAA0193 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0193, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0193 BINDING SITE, designated SEQ ID:19449, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60153] Another function of GAM8358 is therefore inhibition of KIAA0193 (Accession NP_055581.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0193.

[60154] KIAA0237 (Accession NP_055562.1) is another GAM8358 target gene, herein designated TARGET GENE. KIAA0237 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0237, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0237 BINDING SITE, designated SEQ ID:19327, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60155] Another function of GAM8358 is therefore inhibition of KIAA0237 (Accession NP_055562.1). Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0237.

[60156] KIAA0298 (Accession XP_084529.6) is another GAM8358 target gene, herein designated TARGET GENE. KIAA0298 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0298, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0298 BINDING SITE, designated SEQ ID:19243, to the

nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60157] Another function of GAM8358 is therefore inhibition of KIAA0298 (Accession XP_084529.6) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0298.

[60158] KIAA0329 (Accession NP_055659.1) is another GAM8358 target gene, herein designated TARGET GENE. KIAA0329 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0329, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0329 BINDING SITE, designated SEQ ID:4476, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60159] Another function of GAM8358 is therefore inhibition of KIAA0329 (Accession NP_055659.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0329.

[60160] KIAA0377 (Accession NP_055474.1) is another GAM8358

target gene, herein designated TARGET GENE. KIAA0377 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0377, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0377 BINDING SITE, designated SEQ ID:1638, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60161] Another function of GAM8358 is therefore inhibition of KIAA0377 (Accession NP_055474.1). Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0377.

[60162] KIAA0404 (Accession XP_290517.1) is another GAM8358 target gene, herein designated TARGET GENE. KIAA0404 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0404, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0404 BINDING SITE, designated SEQ ID:18934, to the nucleotide sequence of GAM8358 RNA, herein designated

GAM RNA, also designated SEQ ID:255.

[60163] Another function of GAM8358 is therefore inhibition of KIAA0404 (Accession XP_290517.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0404.

[60164] KIAA0472 (Accession XP_290898.1) is another GAM8358 target gene, herein designated TARGET GENE. KIAA0472 BINDING SITE is a target binding site found in the 5` un-translated region of mRNA encoded by KIAA0472, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0472 BINDING SITE, designated SEQ ID:10981, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60165] Another function of GAM8358 is therefore inhibition of KIAA0472 (Accession XP_290898.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0472.

[60166] KIAA0495 (Accession XP_031397.1) is another GAM8358 target gene, herein designated TARGET GENE. KIAA0495

BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by KIAA0495, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0495 BINDING SITE, designated SEQ ID:7638, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60167] Another function of GAM8358 is therefore inhibition of KIAA0495 (Accession XP_031397.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0495.

[60168] KIAA0534 (Accession XP_049349.8) is another GAM8358 target gene, herein designated TARGET GENE. KIAA0534 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0534, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0534 BINDING SITE, designated SEQ ID:14353, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60169] Another function of GAM8358 is therefore inhibition of KIAA0534 (Accession XP_049349.8) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0534.

[60170] KIAA0551 (Accession XP_039796.7) is another GAM8358 target gene, herein designated TARGET GENE. KIAA0551 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0551, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0551 BINDING SITE, designated SEQ ID:14105, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60171] Another function of GAM8358 is therefore inhibition of KIAA0551 (Accession XP_039796.7) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0551.

[60172] KIAA0555 (Accession NP_055605.1) is another GAM8358 target gene, herein designated TARGET GENE. KIAA0555 BINDING SITE is a target binding site found in the 3' un-

translated region of mRNA encoded by KIAA0555, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0555 BINDING SITE, designated SEQ ID:10997, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60173] Another function of GAM8358 is therefore inhibition of KIAA0555 (Accession NP_055605.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0555.

[60174] KIAA0721 (Accession NP_067680.2) is another GAM8358 target gene, herein designated TARGET GENE. KIAA0721 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0721, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0721 BINDING SITE, designated SEQ ID:13136, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60175] Another function of GAM8358 is therefore inhibition of

KIAA0721 (Accession NP_067680.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0721.

[60176] KIAA0843 (Accession NP_055760.1) is another GAM8358 target gene, herein designated TARGET GENE. KIAA0843 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0843, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0843 BINDING SITE, designated SEQ ID:3729, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60177] Another function of GAM8358 is therefore inhibition of KIAA0843 (Accession NP_055760.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0843.

[60178] KIAA0962 (Accession XP_290942.1) is another GAM8358 target gene, herein designated TARGET GENE. KIAA0962 BINDING SITE1 and KIAA0962 BINDING SITE2 are target binding sites found in untranslated regions of mRNA en-

coded by KIAA0962, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0962 BINDING SITE1 and KIAA0962 BINDING SITE2, designated SEQ ID:9385 and SEQ ID:18634 respectively, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60179] Another function of GAM8358 is therefore inhibition of KIAA0962 (Accession XP_290942.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0962.

[60180] KIAA1045 (Accession XP_048592.1) is another GAM8358 target gene, herein designated TARGET GENE. KIAA1045 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1045, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1045 BINDING SITE, designated SEQ ID:16854, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60181] Another function of GAM8358 is therefore inhibition of KIAA1045 (Accession XP_048592.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1045.

[60182] KIAA1191 (Accession NP_065177.2) is another GAM8358 target gene, herein designated TARGET GENE. KIAA1191 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1191, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1191 BINDING SITE, designated SEQ ID:18347, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60183] Another function of GAM8358 is therefore inhibition of KIAA1191 (Accession NP_065177.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1191.

[60184] KIAA1328 (Accession XP_029429.4) is another GAM8358 target gene, herein designated TARGET GENE. KIAA1328 BINDING SITE is a target binding site found in the 3' un-

translated region of mRNA encoded by KIAA1328, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1328 BINDING SITE, designated SEQ ID:19188, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60185] Another function of GAM8358 is therefore inhibition of KIAA1328 (Accession XP_029429.4) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1328.

[60186] KIAA1394 (Accession XP_208522.1) is another GAM8358 target gene, herein designated TARGET GENE. KIAA1394 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1394, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1394 BINDING SITE, designated SEQ ID:17260, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60187] Another function of GAM8358 is therefore inhibition of

KIAA1394 (Accession XP_208522.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1394.

[60188] KIAA1404 (Accession NP_066363.1) is another GAM8358 target gene, herein designated TARGET GENE. KIAA1404 BINDING SITE1 and KIAA1404 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by KIAA1404, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1404 BINDING SITE1 and KIAA1404 BINDING SITE2, designated SEQ ID:1732 and SEQ ID:7163 respectively, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60189] Another function of GAM8358 is therefore inhibition of KIAA1404 (Accession NP_066363.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1404.

[60190] KIAA1441 (Accession NP_065883.1) is another GAM8358 target gene, herein designated TARGET GENE. KIAA1441

BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1441, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1441 BINDING SITE, designated SEQ ID:16287, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60191] Another function of GAM8358 is therefore inhibition of KIAA1441 (Accession NP_065883.1). Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1441.

[60192] KIAA1554 (Accession XP_290768.1) is another GAM8358 target gene, herein designated TARGET GENE. KIAA1554 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1554, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1554 BINDING SITE, designated SEQ ID:19407, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60193] Another function of GAM8358 is therefore inhibition of KIAA1554 (Accession XP_290768.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1554.

[60194] KIAA1683 (Accession XP_290870.2) is another GAM8358 target gene, herein designated TARGET GENE. KIAA1683 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by KIAA1683, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1683 BINDING SITE, designated SEQ ID:6606, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60195] Another function of GAM8358 is therefore inhibition of KIAA1683 (Accession XP_290870.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1683.

[60196] KIAA1735 (Accession XP_290496.1) is another GAM8358 target gene, herein designated TARGET GENE. KIAA1735 BINDING SITE is a target binding site found in the 3' un-

translated region of mRNA encoded by KIAA1735, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1735 BINDING SITE, designated SEQ ID:8127, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60197] Another function of GAM8358 is therefore inhibition of KIAA1735 (Accession XP_290496.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1735.

[60198] KIAA1750 (Accession NP_277047.1) is another GAM8358 target gene, herein designated TARGET GENE. KIAA1750 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1750, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1750 BINDING SITE, designated SEQ ID:2837, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60199] Another function of GAM8358 is therefore inhibition of

KIAA1750 (Accession NP_277047.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1750.

[60200] KIAA1872 (Accession NP_149053.1) is another GAM8358 target gene, herein designated TARGET GENE. KIAA1872 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1872, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1872 BINDING SITE, designated SEQ ID:2574, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60201] Another function of GAM8358 is therefore inhibition of KIAA1872 (Accession NP_149053.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1872.

[60202] KIAA1915 (Accession XP_055481.1) is another GAM8358 target gene, herein designated TARGET GENE. KIAA1915 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1915, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1915 BINDING SITE, designated SEQ ID:8633, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60203] Another function of GAM8358 is therefore inhibition of KIAA1915 (Accession XP_055481.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1915.

[60204] KIAA1940 (Accession XP_086981.2) is another GAM8358 target gene, herein designated TARGET GENE. KIAA1940 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1940, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1940 BINDING SITE, designated SEQ ID:20086, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60205] Another function of GAM8358 is therefore inhibition of KIAA1940 (Accession XP_086981.2) . Accordingly, utilities

of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1940.

[60206] KIAA1949 (Accession XP_166376.1) is another GAM8358 target gene, herein designated TARGET GENE. KIAA1949 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by KIAA1949, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1949 BINDING SITE, designated SEQ ID:18390, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60207] Another function of GAM8358 is therefore inhibition of KIAA1949 (Accession XP_166376.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1949.

[60208] KIAA1949 (Accession XP_300167.1) is another GAM8358 target gene, herein designated TARGET GENE. KIAA1949 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded

by KIAA1949, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1949 BINDING SITE, designated SEQ ID:18390, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60209] Another function of GAM8358 is therefore inhibition of KIAA1949 (Accession XP_300167.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1949.

[60210] KIAA1949 (Accession XP_300202.1) is another GAM8358 target gene, herein designated TARGET GENE. KIAA1949 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by KIAA1949, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1949 BINDING SITE, designated SEQ ID:18390, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60211] Another function of GAM8358 is therefore inhibition of KIAA1949 (Accession XP_300202.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1949.

[60212] KIAA2018 (Accession XP_291062.1) is another GAM8358 target gene, herein designated TARGET GENE. KIAA2018 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA2018, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA2018 BINDING SITE, designated SEQ ID:14076, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60213] Another function of GAM8358 is therefore inhibition of KIAA2018 (Accession XP_291062.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA2018.

[60214] Kinesin family member 5b (KIF5B, Accession NP_004512.1) is another GAM8358 target gene, herein designated TARGET GENE. KIF5B BINDING SITE is a target

binding site found in the 5' untranslated region of mRNA encoded by KIF5B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIF5B BINDING SITE, designated SEQ ID:13109, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60215] Another function of GAM8358 is therefore inhibition of Kinesin family member 5b (KIF5B, Accession NP_004512.1), a gene which is a microtubule-associated force-producing protein that may play a role in organelle transport. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIF5B.

[60216] The function of KIF5B and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM861.2. Karyopherin alpha 6 (importin alpha 7) (KPNA6, Accession NP_036448.1) is another GAM8358 target gene, herein designated TARGET GENE. KPNA6 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KPNA6, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KPNA6 BINDING SITE, designated SEQ ID:15175, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60217] Another function of GAM8358 is therefore inhibition of Karyopherin alpha 6 (importin alpha 7) (KPNA6, Accession NP_036448.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KPNA6.

[60218] LBP-9 (Accession NP_055368.1) is another GAM8358 target gene, herein designated TARGET GENE. LBP-9 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LBP-9, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LBP-9 BINDING SITE, designated SEQ ID:18984, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60219] Another function of GAM8358 is therefore inhibition of LBP-9 (Accession NP_055368.1) . Accordingly, utilities of

GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LBP-9.

[60220] Low density lipoprotein receptor (familial hypercholesterolemia) (LDLR, Accession NP_000518.1) is another GAM8358 target gene, herein designated TARGET GENE. LDLR BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LDLR, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LDLR BINDING SITE, designated SEQ ID:13935, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60221] Another function of GAM8358 is therefore inhibition of Low density lipoprotein receptor (familial hypercholesterolemia) (LDLR, Accession NP_000518.1), a gene which also acts as a tumor suppressor. and therefore is associated with Familial hypercholesterolemia. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of Familial hypercholesterolemia, and of other diseases and clinical conditions associated with LDLR.

[60222] The function of LDLR and its association with various diseases and clinical conditions, has been established by

previous studies, as described hereinabove with reference to GAM99.1.Leiomodin 1 (smooth muscle) (LMOD1, Accession NP_036266.1) is another GAM8358 target gene, herein designated TARGET GENE. LMOD1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LMOD1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LMOD1 BINDING SITE, designated SEQ ID:15622, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60223] Another function of GAM8358 is therefore inhibition of Leiomodin 1 (smooth muscle) (LMOD1, Accession NP_036266.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LMOD1.

[60224] LOC112885 (Accession NP_612424.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC112885 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC112885, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC112885 BINDING SITE, designated SEQ ID:8726, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60225] Another function of GAM8358 is therefore inhibition of LOC112885 (Accession NP_612424.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC112885.

[60226] LOC115110 (Accession XP_049825.5) is another GAM8358 target gene, herein designated TARGET GENE. LOC115110 BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by LOC115110, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC115110 BINDING SITE, designated SEQ ID:5560, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60227] Another function of GAM8358 is therefore inhibition of LOC115110 (Accession XP_049825.5) . Accordingly, utili-

ties of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC115110.

[60228] LOC121838 (Accession XP_071772.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC121838 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC121838, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC121838 BINDING SITE, designated SEQ ID:9861, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60229] Another function of GAM8358 is therefore inhibition of LOC121838 (Accession XP_071772.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC121838.

[60230] LOC128308 (Accession XP_059233.2) is another GAM8358 target gene, herein designated TARGET GENE. LOC128308 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by

LOC128308, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC128308 BINDING SITE, designated SEQ ID:8512, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60231] Another function of GAM8358 is therefore inhibition of LOC128308 (Accession XP_059233.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC128308.

[60232] LOC134147 (Accession NP_620164.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC134147 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC134147, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC134147 BINDING SITE, designated SEQ ID:13019, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60233] Another function of GAM8358 is therefore inhibition of LOC134147 (Accession NP_620164.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC134147.

[60234] LOC139231 (Accession XP_060020.3) is another GAM8358 target gene, herein designated TARGET GENE. LOC139231 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC139231, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC139231 BINDING SITE, designated SEQ ID:7841, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60235] Another function of GAM8358 is therefore inhibition of LOC139231 (Accession XP_060020.3) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC139231.

[60236] LOC146488 (Accession XP_047748.5) is another GAM8358 target gene, herein designated TARGET GENE.

LOC146488 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC146488, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC146488 BINDING SITE, designated SEQ ID:17130, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60237] Another function of GAM8358 is therefore inhibition of LOC146488 (Accession XP_047748.5) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC146488.

[60238] LOC146850 (Accession XP_097109.2) is another GAM8358 target gene, herein designated TARGET GENE. LOC146850 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC146850, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC146850 BINDING SITE, designated SEQ ID:19317, to the nucleotide sequence of

GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60239] Another function of GAM8358 is therefore inhibition of LOC146850 (Accession XP_097109.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC146850.

[60240] LOC147975 (Accession XP_097351.2) is another GAM8358 target gene, herein designated TARGET GENE. LOC147975 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC147975, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC147975 BINDING SITE, designated SEQ ID:12919, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60241] Another function of GAM8358 is therefore inhibition of LOC147975 (Accession XP_097351.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC147975.

[60242] LOC148189 (Accession XP_086087.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC148189 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC148189, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC148189 BINDING SITE, designated SEQ ID:1685, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60243] Another function of GAM8358 is therefore inhibition of LOC148189 (Accession XP_086087.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC148189.

[60244] LOC148930 (Accession XP_086369.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC148930 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC148930, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC148930 BINDING SITE, designated SEQ ID:8018, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60245] Another function of GAM8358 is therefore inhibition of LOC148930 (Accession XP_086369.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC148930.

[60246] LOC149271 (Accession XP_086475.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC149271 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC149271, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC149271 BINDING SITE, designated SEQ ID:1162, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60247] Another function of GAM8358 is therefore inhibition of LOC149271 (Accession XP_086475.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC149271.

[60248] LOC149448 (Accession XP_097642.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC149448 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC149448, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC149448 BINDING SITE, designated SEQ ID:3902, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60249] Another function of GAM8358 is therefore inhibition of LOC149448 (Accession XP_097642.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC149448.

[60250] LOC149464 (Accession XP_097645.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC149464 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC149464, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC149464 BINDING SITE, designated SEQ ID:19340, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60251] Another function of GAM8358 is therefore inhibition of LOC149464 (Accession XP_097645.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC149464.

[60252] LOC150946 (Accession XP_097977.2) is another GAM8358 target gene, herein designated TARGET GENE. LOC150946 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC150946, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC150946 BINDING SITE, designated SEQ ID:12653, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60253] Another function of GAM8358 is therefore inhibition of

LOC150946 (Accession XP_097977.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC150946.

[60254] LOC151154 (Accession XP_098008.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC151154 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC151154, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC151154 BINDING SITE, designated SEQ ID:12623, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60255] Another function of GAM8358 is therefore inhibition of LOC151154 (Accession XP_098008.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC151154.

[60256] LOC152190 (Accession XP_045692.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC152190 BINDING SITE is a target binding site found in

the 5' untranslated region of mRNA encoded by LOC152190, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC152190 BINDING SITE, designated SEQ ID:9697, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60257] Another function of GAM8358 is therefore inhibition of LOC152190 (Accession XP_045692.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC152190.

[60258] LOC154877 (Accession XP_098626.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC154877 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC154877, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC154877 BINDING SITE, designated SEQ ID:12900, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also design-

nated SEQ ID:255.

[60259] Another function of GAM8358 is therefore inhibition of LOC154877 (Accession XP_098626.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC154877.

[60260] LOC157381 (Accession XP_098754.5) is another GAM8358 target gene, herein designated TARGET GENE. LOC157381 BINDING SITE1 and LOC157381 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC157381, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC157381 BINDING SITE1 and LOC157381 BINDING SITE2, designated SEQ ID:11073 and SEQ ID:13288 respectively, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60261] Another function of GAM8358 is therefore inhibition of LOC157381 (Accession XP_098754.5) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC157381.

[60262] LOC157531 (Accession XP_212210.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC157531 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by LOC157531, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC157531 BINDING SITE, designated SEQ ID:8038, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60263] Another function of GAM8358 is therefore inhibition of LOC157531 (Accession XP_212210.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC157531.

[60264] LOC158318 (Accession XP_098925.7) is another GAM8358 target gene, herein designated TARGET GENE. LOC158318 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC158318, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC158318 BINDING SITE, designated SEQ ID:10509, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60265] Another function of GAM8358 is therefore inhibition of LOC158318 (Accession XP_098925.7) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC158318.

[60266] LOC164714 (Accession XP_104657.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC164714 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC164714, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC164714 BINDING SITE, designated SEQ ID:3977, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60267] Another function of GAM8358 is therefore inhibition of LOC164714 (Accession XP_104657.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC164714.

[60268] LOC164729 (Accession XP_092976.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC164729 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC164729, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC164729 BINDING SITE, designated SEQ ID:1980, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60269] Another function of GAM8358 is therefore inhibition of LOC164729 (Accession XP_092976.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC164729.

[60270] LOC170371 (Accession XP_096316.5) is another GAM8358 target gene, herein designated TARGET GENE. LOC170371 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC170371, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC170371 BINDING SITE, designated SEQ ID:3757, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60271] Another function of GAM8358 is therefore inhibition of LOC170371 (Accession XP_096316.5) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC170371.

[60272] LOC170394 (Accession XP_096329.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC170394 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC170394, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC170394 BINDING SITE, designated SEQ ID:20058, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60273] Another function of GAM8358 is therefore inhibition of

LOC170394 (Accession XP_096329.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC170394.

[60274] LOC196996 (Accession XP_113796.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC196996 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC196996, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC196996 BINDING SITE, designated SEQ ID:10671, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60275] Another function of GAM8358 is therefore inhibition of LOC196996 (Accession XP_113796.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC196996.

[60276] LOC200312 (Accession XP_117224.3) is another GAM8358 target gene, herein designated TARGET GENE. LOC200312 BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by LOC200312, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC200312 BINDING SITE, designated SEQ ID:4936, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60277] Another function of GAM8358 is therefore inhibition of LOC200312 (Accession XP_117224.3) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC200312.

[60278] LOC221122 (Accession XP_167867.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC221122 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC221122, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC221122 BINDING SITE, designated SEQ ID:14736, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also design-

nated SEQ ID:255.

[60279] Another function of GAM8358 is therefore inhibition of LOC221122 (Accession XP_167867.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC221122.

[60280] LOC253216 (Accession XP_170765.2) is another GAM8358 target gene, herein designated TARGET GENE. LOC253216 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC253216, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC253216 BINDING SITE, designated SEQ ID:16497, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60281] Another function of GAM8358 is therefore inhibition of LOC253216 (Accession XP_170765.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC253216.

[60282] LOC256614 (Accession XP_172864.1) is another

GAM8358 target gene, herein designated TARGET GENE. LOC256614 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC256614, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC256614 BINDING SITE, designated SEQ ID:7454, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60283] Another function of GAM8358 is therefore inhibition of LOC256614 (Accession XP_172864.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC256614.

[60284] LOC256949 (Accession XP_170882.3) is another GAM8358 target gene, herein designated TARGET GENE. LOC256949 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC256949, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC256949 BINDING SITE, design-

nated SEQ ID:1184, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60285] Another function of GAM8358 is therefore inhibition of LOC256949 (Accession XP_170882.3) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC256949.

[60286] LOC282972 (Accession XP_210837.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC282972 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC282972, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC282972 BINDING SITE, designated SEQ ID:8517, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60287] Another function of GAM8358 is therefore inhibition of LOC282972 (Accession XP_210837.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC282972.

[60288] LOC282997 (Accession XP_208473.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC282997 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC282997, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC282997 BINDING SITE, designated SEQ ID:17627, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60289] Another function of GAM8358 is therefore inhibition of LOC282997 (Accession XP_208473.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC282997.

[60290] LOC283166 (Accession XP_210906.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC283166 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283166, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283166 BINDING SITE, designated SEQ ID:17655, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60291] Another function of GAM8358 is therefore inhibition of LOC283166 (Accession XP_210906.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283166.

[60292] LOC283357 (Accession XP_210991.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC283357 BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by LOC283357, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283357 BINDING SITE, designated SEQ ID:13210, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60293] Another function of GAM8358 is therefore inhibition of LOC283357 (Accession XP_210991.1) . Accordingly, utili-

ties of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283357.

[60294] LOC283437 (Accession XP_211038.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC283437 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283437, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283437 BINDING SITE, designated SEQ ID:3817, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60295] Another function of GAM8358 is therefore inhibition of LOC283437 (Accession XP_211038.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283437.

[60296] LOC283584 (Accession XP_211108.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC283584 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by

LOC283584, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283584 BINDING SITE, designated SEQ ID:1675, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60297] Another function of GAM8358 is therefore inhibition of LOC283584 (Accession XP_211108.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283584.

[60298] LOC283816 (Accession XP_208859.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC283816 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC283816, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283816 BINDING SITE, designated SEQ ID:4085, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60299] Another function of GAM8358 is therefore inhibition of LOC283816 (Accession XP_208859.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283816.

[60300] LOC283908 (Accession XP_211252.3) is another GAM8358 target gene, herein designated TARGET GENE. LOC283908 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283908, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283908 BINDING SITE, designated SEQ ID:3468, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60301] Another function of GAM8358 is therefore inhibition of LOC283908 (Accession XP_211252.3) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283908.

[60302] LOC284113 (Accession XP_209021.1) is another GAM8358 target gene, herein designated TARGET GENE.

LOC284113 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC284113, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284113 BINDING SITE, designated SEQ ID:9360, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60303] Another function of GAM8358 is therefore inhibition of LOC284113 (Accession XP_209021.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284113.

[60304] LOC284167 (Accession XP_208171.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC284167 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC284167, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284167 BINDING SITE, designated SEQ ID:15015, to the nucleotide sequence of

GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60305] Another function of GAM8358 is therefore inhibition of LOC284167 (Accession XP_208171.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284167.

[60306] LOC284214 (Accession XP_302709.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC284214 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC284214, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284214 BINDING SITE, designated SEQ ID:5281, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60307] Another function of GAM8358 is therefore inhibition of LOC284214 (Accession XP_302709.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284214.

[60308] LOC284297 (Accession XP_209112.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC284297 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC284297, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284297 BINDING SITE, designated SEQ ID:2290, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60309] Another function of GAM8358 is therefore inhibition of LOC284297 (Accession XP_209112.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284297.

[60310] LOC284360 (Accession XP_211433.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC284360 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC284360, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC284360 BINDING SITE, designated SEQ ID:6189, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60311] Another function of GAM8358 is therefore inhibition of LOC284360 (Accession XP_211433.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284360.

[60312] LOC284515 (Accession XP_208210.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC284515 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284515, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284515 BINDING SITE, designated SEQ ID:1267, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60313] Another function of GAM8358 is therefore inhibition of LOC284515 (Accession XP_208210.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC284515.

[60314] LOC284541 (Accession XP_208213.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC284541 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC284541, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284541 BINDING SITE, designated SEQ ID:13630, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60315] Another function of GAM8358 is therefore inhibition of LOC284541 (Accession XP_208213.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284541.

[60316] LOC284613 (Accession XP_209289.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC284613 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284613, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284613 BINDING SITE, designated SEQ ID:7866, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60317] Another function of GAM8358 is therefore inhibition of LOC284613 (Accession XP_209289.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284613.

[60318] LOC284647 (Accession XP_211569.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC284647 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284647, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284647 BINDING SITE, designated SEQ ID:8597, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60319] Another function of GAM8358 is therefore inhibition of

LOC284647 (Accession XP_211569.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284647.

[60320] LOC284691 (Accession XP_209321.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC284691 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284691, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284691 BINDING SITE, designated SEQ ID:19474, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60321] Another function of GAM8358 is therefore inhibition of LOC284691 (Accession XP_209321.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284691.

[60322] LOC284693 (Accession XP_209323.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC284693 BINDING SITE is a target binding site found in

the 5' untranslated region of mRNA encoded by LOC284693, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284693 BINDING SITE, designated SEQ ID:8248, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60323] Another function of GAM8358 is therefore inhibition of LOC284693 (Accession XP_209323.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284693.

[60324] LOC284731 (Accession XP_211604.2) is another GAM8358 target gene, herein designated TARGET GENE. LOC284731 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284731, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284731 BINDING SITE, designated SEQ ID:10087, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also design-

nated SEQ ID:255.

[60325] Another function of GAM8358 is therefore inhibition of LOC284731 (Accession XP_211604.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284731.

[60326] LOC284732 (Accession XP_211608.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC284732 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC284732, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284732 BINDING SITE, designated SEQ ID:19911, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60327] Another function of GAM8358 is therefore inhibition of LOC284732 (Accession XP_211608.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284732.

[60328] LOC284805 (Accession XP_209371.1) is another

GAM8358 target gene, herein designated TARGET GENE. LOC284805 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC284805, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284805 BINDING SITE, designated SEQ ID:1280, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60329] Another function of GAM8358 is therefore inhibition of LOC284805 (Accession XP_209371.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284805.

[60330] LOC284899 (Accession XP_211680.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC284899 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284899, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284899 BINDING SITE, design-

nated SEQ ID:9090, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60331] Another function of GAM8358 is therefore inhibition of LOC284899 (Accession XP_211680.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284899.

[60332] LOC285036 (Accession XP_210798.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC285036 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285036, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285036 BINDING SITE, designated SEQ ID:5411, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60333] Another function of GAM8358 is therefore inhibition of LOC285036 (Accession XP_210798.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC285036.

[60334] LOC285392 (Accession XP_211879.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC285392 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC285392, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285392 BINDING SITE, designated SEQ ID:19896, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60335] Another function of GAM8358 is therefore inhibition of LOC285392 (Accession XP_211879.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285392.

[60336] LOC285397 (Accession XP_211876.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC285397 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC285397, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285397 BINDING SITE, designated SEQ ID:19532, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60337] Another function of GAM8358 is therefore inhibition of LOC285397 (Accession XP_211876.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285397.

[60338] LOC285478 (Accession XP_211909.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC285478 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285478, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285478 BINDING SITE, designated SEQ ID:11311, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60339] Another function of GAM8358 is therefore inhibition of LOC285478 (Accession XP_211909.1) . Accordingly, utili-

ties of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285478.

[60340] LOC285587 (Accession XP_211947.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC285587 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285587, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285587 BINDING SITE, designated SEQ ID:18189, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60341] Another function of GAM8358 is therefore inhibition of LOC285587 (Accession XP_211947.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285587.

[60342] LOC285602 (Accession XP_209676.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC285602 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by

LOC285602, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285602 BINDING SITE, designated SEQ ID:4457, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60343] Another function of GAM8358 is therefore inhibition of LOC285602 (Accession XP_209676.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285602.

[60344] LOC285705 (Accession XP_209726.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC285705 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285705, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285705 BINDING SITE, designated SEQ ID:13089, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60345] Another function of GAM8358 is therefore inhibition of LOC285705 (Accession XP_209726.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285705.

[60346] LOC285762 (Accession XP_212011.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC285762 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285762, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285762 BINDING SITE, designated SEQ ID:12096, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60347] Another function of GAM8358 is therefore inhibition of LOC285762 (Accession XP_212011.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285762.

[60348] LOC285858 (Accession XP_212037.1) is another GAM8358 target gene, herein designated TARGET GENE.

LOC285858 BINDING SITE1 and LOC285858 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC285858, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285858 BINDING SITE1 and LOC285858 BINDING SITE2, designated SEQ ID:4884 and SEQ ID:6422 respectively, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60349] Another function of GAM8358 is therefore inhibition of LOC285858 (Accession XP_212037.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285858.

[60350] LOC285924 (Accession XP_209816.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC285924 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285924, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285924 BINDING SITE, design-

nated SEQ ID:7453, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60351] Another function of GAM8358 is therefore inhibition of LOC285924 (Accession XP_209816.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285924.

[60352] LOC285931 (Accession NP_777609.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC285931 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285931, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285931 BINDING SITE, designated SEQ ID:17650, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60353] Another function of GAM8358 is therefore inhibition of LOC285931 (Accession NP_777609.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC285931.

[60354] LOC285940 (Accession XP_208366.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC285940 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC285940, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285940 BINDING SITE, designated SEQ ID:13769, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60355] Another function of GAM8358 is therefore inhibition of LOC285940 (Accession XP_208366.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285940.

[60356] LOC286016 (Accession XP_209853.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC286016 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286016, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286016 BINDING SITE, designated SEQ ID:3955, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60357] Another function of GAM8358 is therefore inhibition of LOC286016 (Accession XP_209853.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286016.

[60358] LOC286052 (Accession XP_212152.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC286052 BINDING SITE1 and LOC286052 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC286052, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286052 BINDING SITE1 and LOC286052 BINDING SITE2, designated SEQ ID:4733 and SEQ ID:1344 respectively, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60359] Another function of GAM8358 is therefore inhibition of

LOC286052 (Accession XP_212152.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286052.

[60360] LOC286076 (Accession XP_209889.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC286076 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286076, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286076 BINDING SITE, designated SEQ ID:10597, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60361] Another function of GAM8358 is therefore inhibition of LOC286076 (Accession XP_209889.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286076.

[60362] LOC286078 (Accession XP_212163.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC286078 BINDING SITE is a target binding site found in

the 5' untranslated region of mRNA encoded by LOC286078, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286078 BINDING SITE, designated SEQ ID:6499, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60363] Another function of GAM8358 is therefore inhibition of LOC286078 (Accession XP_212163.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286078.

[60364] LOC286121 (Accession XP_212184.3) is another GAM8358 target gene, herein designated TARGET GENE. LOC286121 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286121, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286121 BINDING SITE, designated SEQ ID:9669, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also design-

nated SEQ ID:255.

[60365] Another function of GAM8358 is therefore inhibition of LOC286121 (Accession XP_212184.3) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286121.

[60366] LOC286217 (Accession XP_212232.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC286217 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286217, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286217 BINDING SITE, designated SEQ ID:4906, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60367] Another function of GAM8358 is therefore inhibition of LOC286217 (Accession XP_212232.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286217.

[60368] LOC286374 (Accession XP_212293.1) is another

GAM8358 target gene, herein designated TARGET GENE. LOC286374 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC286374, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286374 BINDING SITE, designated SEQ ID:18959, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60369] Another function of GAM8358 is therefore inhibition of LOC286374 (Accession XP_212293.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286374.

[60370] LOC286404 (Accession XP_210036.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC286404 BINDING SITE1 and LOC286404 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by LOC286404, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC286404 BINDING SITE1 and LOC286404 BINDING SITE2, designated SEQ ID:4632 and SEQ ID:4632 respectively, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60371] Another function of GAM8358 is therefore inhibition of LOC286404 (Accession XP_210036.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286404.

[60372] LOC286404 (Accession XP_210036.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC286404 BINDING SITE1 and LOC286404 BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by LOC286404, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286404 BINDING SITE1 and LOC286404 BINDING SITE2, designated SEQ ID:3416 and SEQ ID:1033 respectively, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60373] Another function of GAM8358 is therefore inhibition of LOC286404 (Accession XP_210036.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286404.

[60374] LOC286456 (Accession XP_210057.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC286456 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286456, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286456 BINDING SITE, designated SEQ ID:3469, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60375] Another function of GAM8358 is therefore inhibition of LOC286456 (Accession XP_210057.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286456.

[60376] LOC286493 (Accession XP_208437.1) is another GAM8358 target gene, herein designated TARGET GENE.

LOC286493 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286493, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286493 BINDING SITE, designated SEQ ID:1737, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60377] Another function of GAM8358 is therefore inhibition of LOC286493 (Accession XP_208437.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286493.

[60378] LOC286529 (Accession XP_210090.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC286529 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC286529, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286529 BINDING SITE, designated SEQ ID:13990, to the nucleotide sequence of

GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60379] Another function of GAM8358 is therefore inhibition of LOC286529 (Accession XP_210090.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286529.

[60380] LOC338588 (Accession XP_294659.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC338588 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC338588, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338588 BINDING SITE, designated SEQ ID:12673, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60381] Another function of GAM8358 is therefore inhibition of LOC338588 (Accession XP_294659.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC338588.

[60382] LOC338773 (Accession XP_290570.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC338773 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC338773, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338773 BINDING SITE, designated SEQ ID:5276, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60383] Another function of GAM8358 is therefore inhibition of LOC338773 (Accession XP_290570.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC338773.

[60384] LOC338811 (Accession XP_290586.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC338811 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC338811, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC338811 BINDING SITE, designated SEQ ID:1697, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60385] Another function of GAM8358 is therefore inhibition of LOC338811 (Accession XP_290586.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC338811.

[60386] LOC338959 (Accession XP_294754.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC338959 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC338959, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338959 BINDING SITE, designated SEQ ID:4800, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60387] Another function of GAM8358 is therefore inhibition of LOC338959 (Accession XP_294754.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC338959.

[60388] LOC339059 (Accession XP_290682.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC339059 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339059, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339059 BINDING SITE, designated SEQ ID:20096, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60389] Another function of GAM8358 is therefore inhibition of LOC339059 (Accession XP_290682.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339059.

[60390] LOC339149 (Accession XP_294830.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC339149 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC339149, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339149 BINDING SITE, designated SEQ ID:10008, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60391] Another function of GAM8358 is therefore inhibition of LOC339149 (Accession XP_294830.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339149.

[60392] LOC339161 (Accession XP_294835.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC339161 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC339161, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339161 BINDING SITE, designated SEQ ID:13786, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60393] Another function of GAM8358 is therefore inhibition of

LOC339161 (Accession XP_294835.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339161.

[60394] LOC339290 (Accession XP_294901.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC339290 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC339290, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339290 BINDING SITE, designated SEQ ID:11490, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60395] Another function of GAM8358 is therefore inhibition of LOC339290 (Accession XP_294901.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339290.

[60396] LOC339305 (Accession XP_297112.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC339305 BINDING SITE is a target binding site found in

the 5' untranslated region of mRNA encoded by LOC339305, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339305 BINDING SITE, designated SEQ ID:11710, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60397] Another function of GAM8358 is therefore inhibition of LOC339305 (Accession XP_297112.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339305.

[60398] LOC339442 (Accession XP_294957.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC339442 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339442, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339442 BINDING SITE, designated SEQ ID:14243, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also design-

nated SEQ ID:255.

[60399] Another function of GAM8358 is therefore inhibition of LOC339442 (Accession XP_294957.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339442.

[60400] LOC339459 (Accession XP_290907.2) is another GAM8358 target gene, herein designated TARGET GENE. LOC339459 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC339459, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339459 BINDING SITE, designated SEQ ID:10510, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60401] Another function of GAM8358 is therefore inhibition of LOC339459 (Accession XP_290907.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339459.

[60402] LOC339607 (Accession XP_290962.1) is another

GAM8358 target gene, herein designated TARGET GENE. LOC339607 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC339607, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339607 BINDING SITE, designated SEQ ID:9001, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60403] Another function of GAM8358 is therefore inhibition of LOC339607 (Accession XP_290962.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339607.

[60404] LOC339685 (Accession XP_295032.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC339685 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC339685, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339685 BINDING SITE, design-

nated SEQ ID:18585, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60405] Another function of GAM8358 is therefore inhibition of LOC339685 (Accession XP_295032.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339685.

[60406] LOC339914 (Accession XP_295099.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC339914 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC339914, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339914 BINDING SITE, designated SEQ ID:7941, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60407] Another function of GAM8358 is therefore inhibition of LOC339914 (Accession XP_295099.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC339914.

[60408] LOC340204 (Accession XP_291169.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC340204 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC340204, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340204 BINDING SITE, designated SEQ ID:4985, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60409] Another function of GAM8358 is therefore inhibition of LOC340204 (Accession XP_291169.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340204.

[60410] LOC340232 (Accession XP_290386.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC340232 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC340232, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340232 BINDING SITE, designated SEQ ID:6120, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60411] Another function of GAM8358 is therefore inhibition of LOC340232 (Accession XP_290386.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340232.

[60412] LOC340290 (Accession XP_291214.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC340290 BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by LOC340290, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340290 BINDING SITE, designated SEQ ID:14581, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60413] Another function of GAM8358 is therefore inhibition of LOC340290 (Accession XP_291214.1) . Accordingly, utili-

ties of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340290.

[60414] LOC344782 (Accession XP_298281.2) is another GAM8358 target gene, herein designated TARGET GENE. LOC344782 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC344782, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC344782 BINDING SITE, designated SEQ ID:17217, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60415] Another function of GAM8358 is therefore inhibition of LOC344782 (Accession XP_298281.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC344782.

[60416] LOC345749 (Accession XP_298978.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC345749 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by

LOC345749, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC345749 BINDING SITE, designated SEQ ID:9069, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60417] Another function of GAM8358 is therefore inhibition of LOC345749 (Accession XP_298978.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC345749.

[60418] LOC347166 (Accession XP_294530.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC347166 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC347166, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC347166 BINDING SITE, designated SEQ ID:13274, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60419] Another function of GAM8358 is therefore inhibition of LOC347166 (Accession XP_294530.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC347166.

[60420] LOC347767 (Accession XP_300531.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC347767 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC347767, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC347767 BINDING SITE, designated SEQ ID:6985, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60421] Another function of GAM8358 is therefore inhibition of LOC347767 (Accession XP_300531.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC347767.

[60422] LOC347803 (Accession XP_302604.1) is another GAM8358 target gene, herein designated TARGET GENE.

LOC347803 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC347803, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC347803 BINDING SITE, designated SEQ ID:13761, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60423] Another function of GAM8358 is therefore inhibition of LOC347803 (Accession XP_302604.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC347803.

[60424] LOC348121 (Accession XP_302567.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC348121 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC348121, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348121 BINDING SITE, designated SEQ ID:17997, to the nucleotide sequence of

GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60425] Another function of GAM8358 is therefore inhibition of LOC348121 (Accession XP_302567.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348121.

[60426] LOC348155 (Accession XP_211219.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC348155 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC348155, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348155 BINDING SITE, designated SEQ ID:2553, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60427] Another function of GAM8358 is therefore inhibition of LOC348155 (Accession XP_211219.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348155.

[60428] LOC348209 (Accession XP_300304.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC348209 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC348209, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348209 BINDING SITE, designated SEQ ID:17130, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60429] Another function of GAM8358 is therefore inhibition of LOC348209 (Accession XP_300304.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348209.

[60430] LOC348258 (Accession XP_300686.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC348258 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC348258, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC348258 BINDING SITE, designated SEQ ID:12407, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60431] Another function of GAM8358 is therefore inhibition of LOC348258 (Accession XP_300686.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348258.

[60432] LOC348389 (Accession XP_302739.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC348389 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC348389, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348389 BINDING SITE, designated SEQ ID:7856, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60433] Another function of GAM8358 is therefore inhibition of LOC348389 (Accession XP_302739.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC348389.

[60434] LOC348396 (Accession XP_300729.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC348396 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC348396, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348396 BINDING SITE, designated SEQ ID:10069, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60435] Another function of GAM8358 is therefore inhibition of LOC348396 (Accession XP_300729.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348396.

[60436] LOC348761 (Accession XP_302869.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC348761 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC348761, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348761 BINDING SITE, designated SEQ ID:17866, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60437] Another function of GAM8358 is therefore inhibition of LOC348761 (Accession XP_302869.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348761.

[60438] LOC348768 (Accession XP_302883.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC348768 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC348768, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348768 BINDING SITE, designated SEQ ID:6580, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60439] Another function of GAM8358 is therefore inhibition of

LOC348768 (Accession XP_302883.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348768.

[60440] LOC349101 (Accession XP_173186.2) is another GAM8358 target gene, herein designated TARGET GENE. LOC349101 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC349101, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349101 BINDING SITE, designated SEQ ID:7453, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60441] Another function of GAM8358 is therefore inhibition of LOC349101 (Accession XP_173186.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349101.

[60442] LOC349278 (Accession XP_301004.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC349278 BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by LOC349278, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349278 BINDING SITE, designated SEQ ID:10509, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60443] Another function of GAM8358 is therefore inhibition of LOC349278 (Accession XP_301004.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349278.

[60444] LOC349302 (Accession XP_301017.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC349302 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC349302, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349302 BINDING SITE, designated SEQ ID:10509, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also design-

nated SEQ ID:255.

[60445] Another function of GAM8358 is therefore inhibition of LOC349302 (Accession XP_301017.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349302.

[60446] LOC349337 (Accession XP_301037.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC349337 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC349337, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349337 BINDING SITE, designated SEQ ID:13247, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60447] Another function of GAM8358 is therefore inhibition of LOC349337 (Accession XP_301037.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349337.

[60448] LOC349430 (Accession XP_301084.1) is another

GAM8358 target gene, herein designated TARGET GENE. LOC349430 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC349430, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349430 BINDING SITE, designated SEQ ID:1033, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60449] Another function of GAM8358 is therefore inhibition of LOC349430 (Accession XP_301084.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349430.

[60450] LOC350176 (Accession XP_303855.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC350176 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC350176, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC350176 BINDING SITE, design-

nated SEQ ID:16322, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60451] Another function of GAM8358 is therefore inhibition of LOC350176 (Accession XP_303855.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC350176.

[60452] LOC350717 (Accession XP_303117.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC350717 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC350717, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC350717 BINDING SITE, designated SEQ ID:1938, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60453] Another function of GAM8358 is therefore inhibition of LOC350717 (Accession XP_303117.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC350717.

[60454] LOC350897 (Accession XP_303256.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC350897 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC350897, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC350897 BINDING SITE, designated SEQ ID:18754, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60455] Another function of GAM8358 is therefore inhibition of LOC350897 (Accession XP_303256.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC350897.

[60456] LOC350935 (Accession XP_304543.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC350935 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC350935, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC350935 BINDING SITE, designated SEQ ID:17196, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60457] Another function of GAM8358 is therefore inhibition of LOC350935 (Accession XP_304543.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC350935.

[60458] LOC51236 (Accession NP_057542.2) is another GAM8358 target gene, herein designated TARGET GENE. LOC51236 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC51236, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC51236 BINDING SITE, designated SEQ ID:19076, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60459] Another function of GAM8358 is therefore inhibition of LOC51236 (Accession NP_057542.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC51236.

[60460] LOC55954 (Accession NP_061976.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC55954 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC55954, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC55954 BINDING SITE, designated SEQ ID:17880, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60461] Another function of GAM8358 is therefore inhibition of LOC55954 (Accession NP_061976.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC55954.

[60462] LOC81558 (Accession NP_110429.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC81558 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC81558, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of LOC81558 BINDING SITE, designated SEQ ID:16662, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60463] Another function of GAM8358 is therefore inhibition of LOC81558 (Accession NP_110429.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC81558.

[60464] LOC90167 (Accession XP_029570.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC90167 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC90167, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC90167 BINDING SITE, designated SEQ ID:4312, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60465] Another function of GAM8358 is therefore inhibition of LOC90167 (Accession XP_029570.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC90167.

[60466] LOC92078 (Accession XP_042684.1) is another GAM8358 target gene, herein designated TARGET GENE. LOC92078 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC92078, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC92078 BINDING SITE, designated SEQ ID:1696, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60467] Another function of GAM8358 is therefore inhibition of LOC92078 (Accession XP_042684.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC92078.

[60468] LOC92267 (Accession XP_043979.3) is another GAM8358 target gene, herein designated TARGET GENE. LOC92267 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC92267, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

LOC92267 BINDING SITE, designated SEQ ID:2289, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60469] Another function of GAM8358 is therefore inhibition of LOC92267 (Accession XP_043979.3) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC92267.

[60470] LOC92973 (Accession XP_048529.2) is another GAM8358 target gene, herein designated TARGET GENE. LOC92973 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC92973, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC92973 BINDING SITE, designated SEQ ID:7336, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60471] Another function of GAM8358 is therefore inhibition of LOC92973 (Accession XP_048529.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC92973.

[60472] Leukotriene b4 receptor 2 (LTB4R2, Accession NP_062813.1) is another GAM8358 target gene, herein designated TARGET GENE. LTB4R2 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LTB4R2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LTB4R2 BINDING SITE, designated SEQ ID:15287, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60473] Another function of GAM8358 is therefore inhibition of Leukotriene b4 receptor 2 (LTB4R2, Accession NP_062813.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LTB4R2.

[60474] Lymphocyte antigen 9 (LY9, Accession NP_002339.1) is another GAM8358 target gene, herein designated TARGET GENE. LY9 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LY9, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences

of LY9 BINDING SITE, designated SEQ ID:3090, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60475] Another function of GAM8358 is therefore inhibition of Lymphocyte antigen 9 (LY9, Accession NP_002339.1), a gene which may participate in adhesion reactions between t lymphocytes and accessory cells by homophilic interaction. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LY9.

[60476] The function of LY9 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM304.1.V-yes-1 yamaguchi sarcoma viral related oncogene homolog (LYN, Accession NP_002341.1) is another GAM8358 target gene, herein designated TARGET GENE. LYN BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LYN, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LYN BINDING SITE, designated SEQ ID:12638, to the nucleotide sequence of GAM8358 RNA, herein designated

GAM RNA, also designated SEQ ID:255.

[60477] Another function of GAM8358 is therefore inhibition of V-yes-1 yamaguchi sarcoma viral related oncogene homolog (LYN, Accession NP_002341.1), a gene which is a Tyrosine kinase with similarity to murine tyrosine kinase p56lck; similar to v-yes protein and the gene products of v-fgr and v-src. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LYN.

[60478] The function of LYN and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM374.2.Mad, mothers against decapentaplegic homolog 6 (drosophila) (MADH6, Accession NP_005576.2) is another GAM8358 target gene, herein designated TARGET GENE. MADH6 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MADH6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MADH6 BINDING SITE, designated SEQ ID:17896, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ

ID:255.

[60479] Another function of GAM8358 is therefore inhibition of Mad, mothers against decapentaplegic homolog 6 (drosophila) (MADH6, Accession NP_005576.2), a gene which may affect transcription in response to TGF- β superfamily signaling pathways, inhibits BMP/Smad1 (MADH1) signaling. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MADH6.

[60480] The function of MADH6 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM357.2.MAGEB6 (Accession NP_775794.2) is another GAM8358 target gene, herein designated TARGET GENE. MAGEB6 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MAGEB6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MAGEB6 BINDING SITE, designated SEQ ID:12419, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60481] Another function of GAM8358 is therefore inhibition of MAGEB6 (Accession NP_775794.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MAGEB6.

[60482] Mitogen-activated protein kinase kinase 5 (MAP2K5, Accession NP_660143.1) is another GAM8358 target gene, herein designated TARGET GENE. MAP2K5 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by MAP2K5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MAP2K5 BINDING SITE, designated SEQ ID:3777, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60483] Another function of GAM8358 is therefore inhibition of Mitogen-activated protein kinase kinase 5 (MAP2K5, Accession NP_660143.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MAP2K5.

[60484] Mitogen-activated protein kinase kinase 5 (MAP2K5, Accession NP_002748.1) is another GAM8358 target gene,

herein designated TARGET GENE. MAP2K5 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by MAP2K5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MAP2K5 BINDING SITE, designated SEQ ID:3777, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60485] Another function of GAM8358 is therefore inhibition of Mitogen-activated protein kinase kinase 5 (MAP2K5, Accession NP_002748.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MAP2K5.

[60486] Mitogen-activated protein kinase kinase 5 (MAP2K5, Accession NP_660144.1) is another GAM8358 target gene, herein designated TARGET GENE. MAP2K5 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by MAP2K5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MAP2K5 BINDING SITE, designated SEQ ID:3777, to the

nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60487] Another function of GAM8358 is therefore inhibition of Mitogen-activated protein kinase kinase 5 (MAP2K5, Accession NP_660144.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MAP2K5.

[60488] MAPBPIP (Accession NP_054736.1) is another GAM8358 target gene, herein designated TARGET GENE. MAPBPIP BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MAPBPIP, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MAPBPIP BINDING SITE, designated SEQ ID:6096, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60489] Another function of GAM8358 is therefore inhibition of MAPBPIP (Accession NP_054736.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MAPBPIP.

[60490] Mitogen-activated protein kinase 13 (MAPK13, Accession

NP_002745.1) is another GAM8358 target gene, herein designated TARGET GENE. MAPK13 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MAPK13, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MAPK13 BINDING SITE, designated SEQ ID:6864, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60491] Another function of GAM8358 is therefore inhibition of Mitogen-activated protein kinase 13 (MAPK13, Accession NP_002745.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MAPK13.

[60492] MAST205 (Accession NP_055927.1) is another GAM8358 target gene, herein designated TARGET GENE. MAST205 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MAST205, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MAST205 BINDING SITE, designated SEQ ID:6973, to the

nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60493] Another function of GAM8358 is therefore inhibition of MAST205 (Accession NP_055927.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MAST205.

[60494] MBIP (Accession NP_057670.1) is another GAM8358 target gene, herein designated TARGET GENE. MBIP BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MBIP, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MBIP BINDING SITE, designated SEQ ID:6554, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60495] Another function of GAM8358 is therefore inhibition of MBIP (Accession NP_057670.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MBIP.

[60496] Mannosyl (alpha-1,3-)-glycoprotein beta-1,4-n-acetylglucosaminyltransferase, isoenzyme b

(MGAT4B, Accession NP_463459.1) is another GAM8358 target gene, herein designated TARGET GENE. MGAT4B BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by MGAT4B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGAT4B BINDING SITE, designated SEQ ID:6555, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60497] Another function of GAM8358 is therefore inhibition of Mannosyl (alpha-1,3-)-glycoprotein beta-1,4-n-acetylglucosaminyltransferase, isoenzyme b (MGAT4B, Accession NP_463459.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGAT4B.

[60498] MGC1136 (Accession NP_076930.1) is another GAM8358 target gene, herein designated TARGET GENE. MGC1136 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC1136, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC1136 BINDING SITE, designated SEQ ID:2422, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60499] Another function of GAM8358 is therefore inhibition of MGC1136 (Accession NP_076930.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC1136.

[60500] MGC14859 (Accession XP_030295.3) is another GAM8358 target gene, herein designated TARGET GENE. MGC14859 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC14859, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC14859 BINDING SITE, designated SEQ ID:2435, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60501] Another function of GAM8358 is therefore inhibition of MGC14859 (Accession XP_030295.3) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with MGC14859.

[60502] MGC15523 (Accession NP_612637.1) is another GAM8358 target gene, herein designated TARGET GENE. MGC15523 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MGC15523, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC15523 BINDING SITE, designated SEQ ID:19724, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60503] Another function of GAM8358 is therefore inhibition of MGC15523 (Accession NP_612637.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC15523.

[60504] MGC15885 (Accession XP_294758.1) is another GAM8358 target gene, herein designated TARGET GENE. MGC15885 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC15885, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of MGC15885 BINDING SITE, designated SEQ ID:2341, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60505] Another function of GAM8358 is therefore inhibition of MGC15885 (Accession XP_294758.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC15885.

[60506] MGC17330 (Accession NP_443112.1) is another GAM8358 target gene, herein designated TARGET GENE. MGC17330 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC17330, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC17330 BINDING SITE, designated SEQ ID:4035, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60507] Another function of GAM8358 is therefore inhibition of MGC17330 (Accession NP_443112.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

MGC17330.

[60508] MGC20398 (Accession NP_443089.1) is another GAM8358 target gene, herein designated TARGET GENE. MGC20398 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC20398, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC20398 BINDING SITE, designated SEQ ID:1889, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60509] Another function of GAM8358 is therefore inhibition of MGC20398 (Accession NP_443089.1). Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC20398.

[60510] MGC23885 (Accession NP_689714.1) is another GAM8358 target gene, herein designated TARGET GENE. MGC23885 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC23885, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

MGC23885 BINDING SITE, designated SEQ ID:11074, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60511] Another function of GAM8358 is therefore inhibition of MGC23885 (Accession NP_689714.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC23885.

[60512] MGC32065 (Accession NP_695003.1) is another GAM8358 target gene, herein designated TARGET GENE. MGC32065 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC32065, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC32065 BINDING SITE, designated SEQ ID:15890, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60513] Another function of GAM8358 is therefore inhibition of MGC32065 (Accession NP_695003.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC32065.

[60514] MGC34830 (Accession NP_689527.1) is another GAM8358 target gene, herein designated TARGET GENE. MGC34830 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC34830, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC34830 BINDING SITE, designated SEQ ID:12612, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60515] Another function of GAM8358 is therefore inhibition of MGC34830 (Accession NP_689527.1). Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC34830.

[60516] MGC39325 (Accession NP_671722.1) is another GAM8358 target gene, herein designated TARGET GENE. MGC39325 BINDING SITE1 and MGC39325 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by MGC39325, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC39325 BINDING SITE1

and MGC39325 BINDING SITE2, designated SEQ ID:7913 and SEQ ID:15215 respectively, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60517] Another function of GAM8358 is therefore inhibition of MGC39325 (Accession NP_671722.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC39325.

[60518] MGC40555 (Accession NP_689498.1) is another GAM8358 target gene, herein designated TARGET GENE. MGC40555 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC40555, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC40555 BINDING SITE, designated SEQ ID:10027, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60519] Another function of GAM8358 is therefore inhibition of MGC40555 (Accession NP_689498.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

MGC40555.

[60520] MGC42630 (Accession NP_787119.1) is another GAM8358 target gene, herein designated TARGET GENE. MGC42630 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC42630, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC42630 BINDING SITE, designated SEQ ID:10509, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60521] Another function of GAM8358 is therefore inhibition of MGC42630 (Accession NP_787119.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC42630.

[60522] MGC5391 (Accession NP_116129.2) is another GAM8358 target gene, herein designated TARGET GENE. MGC5391 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC5391, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

MGC5391 BINDING SITE, designated SEQ ID:12983, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60523] Another function of GAM8358 is therefore inhibition of MGC5391 (Accession NP_116129.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC5391.

[60524] Membrane metallo–endopeptidase (neutral endopeptidase, enkephalinase, calla, cd10) (MME, Accession NP_009220.1) is another GAM8358 target gene, herein designated TARGET GENE. MME BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by MME, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MME BINDING SITE, designated SEQ ID:4104, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60525] Another function of GAM8358 is therefore inhibition of Membrane metallo–endopeptidase (neutral endopeptidase, enkephalinase, calla, cd10) (MME, Accession

NP_009220.1), a gene which is thermolysin- like specificity. and therefore is associated with Acute lymphocytic leukemia. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of Acute lymphocytic leukemia, and of other diseases and clinical conditions associated with MME.

[60526] The function of MME and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM63.1. Membrane metallo- endopeptidase (neutral endopeptidase, enkephalinase, calla, cd10) (MME, Accession NP_009219.1) is another GAM8358 target gene, herein designated TARGET GENE. MME BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by MME, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MME BINDING SITE, designated SEQ ID:4104, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60527] Another function of GAM8358 is therefore inhibition of Membrane metallo- endopeptidase (neutral endopepti-

dase, enkephalinase, calla, cd10) (MME, Accession NP_009219.1), a gene which is thermolysin- like specificity. and therefore is associated with Acute lymphocytic leukemia. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of Acute lymphocytic leukemia, and of other diseases and clinical conditions associated with MME.

[60528] The function of MME and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM63.1. Membrane metallo- endopeptidase (neutral endopeptidase, enkephalinase, calla, cd10) (MME, Accession NP_000893.1) is another GAM8358 target gene, herein designated TARGET GENE. MME BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by MME, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MME BINDING SITE, designated SEQ ID:4104, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60529] Another function of GAM8358 is therefore inhibition of

Membrane metallo–endopeptidase (neutral endopeptidase, enkephalinase, calla, cd10) (MME, Accession NP_000893.1), a gene which is thermolysin– like specificity. and therefore is associated with Acute lymphocytic leukemia. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of Acute lymphocytic leukemia, and of other diseases and clinical conditions associated with MME.

[60530] The function of MME and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM63.1. Membrane metallo–endopeptidase (neutral endopeptidase, enkephalinase, calla, cd10) (MME, Accession NP_009218.1) is another GAM8358 target gene, herein designated TARGET GENE. MME BINDING SITE is a target binding site found in the 3` untranslated region of multiple transcripts of mRNA encoded by MME, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MME BINDING SITE, designated SEQ ID:4104, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60531] Another function of GAM8358 is therefore inhibition of Membrane metallo–endopeptidase (neutral endopeptidase, enkephalinase, calla, cd10) (MME, Accession NP_009218.1), a gene which is thermolysin– like specificity. and therefore is associated with Acute lymphocytic leukemia. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of Acute lymphocytic leukemia, and of other diseases and clinical conditions associated with MME.

[60532] The function of MME and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM63.1. Matrix metalloproteinase 2 (gelatinase a, 72kda gelatinase, 72kda type iv collagenase) (MMP2, Accession NP_004521.1) is another GAM8358 target gene, herein designated TARGET GENE. MMP2 BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by MMP2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MMP2 BINDING SITE, designated SEQ ID:17651, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also design-

nated SEQ ID:255.

[60533] Another function of GAM8358 is therefore inhibition of Matrix metalloproteinase 2 (gelatinase a, 72kda gelatinase, 72kda type iv collagenase) (MMP2, Accession NP_004521.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MMP2.

[60534] MOST2 (Accession NP_064635.1) is another GAM8358 target gene, herein designated TARGET GENE. MOST2 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MOST2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MOST2 BINDING SITE, designated SEQ ID:993, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60535] Another function of GAM8358 is therefore inhibition of MOST2 (Accession NP_064635.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MOST2.

[60536] Membrane protein, palmitoylated 2 (maguk p55 subfamily member 2) (MPP2, Accession NP_005365.2) is another

GAM8358 target gene, herein designated TARGET GENE. MPP2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MPP2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MPP2 BINDING SITE, designated SEQ ID:3308, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60537] Another function of GAM8358 is therefore inhibition of Membrane protein, palmitoylated 2 (maguk p55 subfamily member 2) (MPP2, Accession NP_005365.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MPP2.

[60538] Mitochondrial ribosomal protein I9 (MRPL9, Accession NP_113608.1) is another GAM8358 target gene, herein designated TARGET GENE. MRPL9 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MRPL9, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MRPL9 BINDING SITE, designated

SEQ ID:14139, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60539] Another function of GAM8358 is therefore inhibition of Mitochondrial ribosomal protein I9 (MRPL9, Accession NP_113608.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MRPL9.

[60540] Musashi homolog 2 (drosophila) (MSI2, Accession NP_733839.1) is another GAM8358 target gene, herein designated TARGET GENE. MSI2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by MSI2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MSI2 BINDING SITE, designated SEQ ID:13149, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60541] Another function of GAM8358 is therefore inhibition of Musashi homolog 2 (drosophila) (MSI2, Accession NP_733839.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical

cal conditions associated with MSI2.

[60542] 5,10-methylenetetrahydrofolate reductase (nadph) (MTHFR, Accession NP_005948.1) is another GAM8358 target gene, herein designated TARGET GENE. MTHFR BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MTHFR, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MTHFR BINDING SITE, designated SEQ ID:8401, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60543] Another function of GAM8358 is therefore inhibition of 5,10-methylenetetrahydrofolate reductase (nadph) (MTHFR, Accession NP_005948.1). Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MTHFR.

[60544] V-myb myeloblastosis viral oncogene homolog (avian)-like 2 (MYBL2, Accession NP_002457.1) is another GAM8358 target gene, herein designated TARGET GENE. MYBL2 BINDING SITE1 and MYBL2 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by MYBL2, corresponding to target binding sites

such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MYBL2 BINDING SITE1 and MYBL2 BINDING SITE2, designated SEQ ID:18152 and SEQ ID:6152 respectively, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60545] Another function of GAM8358 is therefore inhibition of V-myb myeloblastosis viral oncogene homolog (avian)-like 2 (MYBL2, Accession NP_002457.1), a gene which plays an essential role during cell cycle progression. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MYBL2.

[60546] The function of MYBL2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM215.1. Myosin binding protein c, slow type (MYBPC1, Accession NP_002456.1) is another GAM8358 target gene, herein designated TARGET GENE. MYBPC1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MYBPC1, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MYBPC1 BINDING SITE, designated SEQ ID:14764, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60547] Another function of GAM8358 is therefore inhibition of Myosin binding protein c, slow type (MYBPC1, Accession NP_002456.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MYBPC1.

[60548] Myosin ib (MYO1B, Accession XP_290989.1) is another GAM8358 target gene, herein designated TARGET GENE. MYO1B BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MYO1B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MYO1B BINDING SITE, designated SEQ ID:15695, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60549] Another function of GAM8358 is therefore inhibition of Myosin ib (MYO1B, Accession XP_290989.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and

treatment of diseases and clinical conditions associated with MYO1B.

[60550] N4BP2 (Accession NP_060647.2) is another GAM8358 target gene, herein designated TARGET GENE. N4BP2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by N4BP2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of N4BP2 BINDING SITE, designated SEQ ID:13301, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60551] Another function of GAM8358 is therefore inhibition of N4BP2 (Accession NP_060647.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with N4BP2.

[60552] N4BP3 (Accession XP_038920.2) is another GAM8358 target gene, herein designated TARGET GENE. N4BP3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by N4BP3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of N4BP3

BINDING SITE, designated SEQ ID:1115, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60553] Another function of GAM8358 is therefore inhibition of N4BP3 (Accession XP_038920.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with N4BP3.

[60554] Ngfi-a binding protein 1 (egr1 binding protein 1) (NAB1, Accession NP_005957.2) is another GAM8358 target gene, herein designated TARGET GENE. NAB1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by NAB1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NAB1 BINDING SITE, designated SEQ ID:3469, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60555] Another function of GAM8358 is therefore inhibition of Ngfi-a binding protein 1 (egr1 binding protein 1) (NAB1, Accession NP_005957.2), a gene which acts as a transcriptional repressor for zinc finger transcription factors egr1 and egr2 (by similarity). Accordingly, utilities of

GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NAB1.

[60556] The function of NAB1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM499.1.NDFIP1 (Accession NP_085048.1) is another GAM8358 target gene, herein designated TARGET GENE. NDFIP1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by NDFIP1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NDFIP1 BINDING SITE, designated SEQ ID:8122, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60557] Another function of GAM8358 is therefore inhibition of NDFIP1 (Accession NP_085048.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NDFIP1.

[60558] NEBL (Accession NP_006384.1) is another GAM8358 target gene, herein designated TARGET GENE. NEBL BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by NEBL, corresponding to a target

binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NEBL BINDING SITE, designated SEQ ID:7080, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60559] Another function of GAM8358 is therefore inhibition of NEBL (Accession NP_006384.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NEBL.

[60560] Neuropilin (nrp) and tolloid (tll)-like 2 (NETO2, Accession NP_060562.3) is another GAM8358 target gene, herein designated TARGET GENE. NETO2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by NETO2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NETO2 BINDING SITE, designated SEQ ID:2069, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60561] Another function of GAM8358 is therefore inhibition of Neuropilin (nrp) and tolloid (tll)-like 2 (NETO2, Accession

NP_060562.3) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NETO2.

[60562] NFASC (Accession XP_046808.8) is another GAM8358 target gene, herein designated TARGET GENE. NFASC BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by NFASC, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NFASC BINDING SITE, designated SEQ ID:521, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60563] Another function of GAM8358 is therefore inhibition of NFASC (Accession XP_046808.8) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NFASC.

[60564] Ninjurin 1 (NINJ1, Accession NP_004139.1) is another GAM8358 target gene, herein designated TARGET GENE. NINJ1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by NINJ1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of NINJ1 BINDING SITE, designated SEQ ID:16214, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60565] Another function of GAM8358 is therefore inhibition of Ninjurin 1 (NINJ1, Accession NP_004139.1), a gene which may play a role in nerve regeneration and in the formation and function of other tissues. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NINJ1.

[60566] The function of NINJ1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM558.1. Natural killer-tumor recognition sequence (NKTR, Accession NP_005376.2) is another GAM8358 target gene, herein designated TARGET GENE. NKTR BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by NKTR, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NKTR BINDING SITE, designated SEQ ID:8666, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA,

also designated SEQ ID:255.

[60567] Another function of GAM8358 is therefore inhibition of Natural killer-tumor recognition sequence (NKTR, Accession NP_005376.2), a gene which is involved in the function of nk cells. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NKTR.

[60568] The function of NKTR and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM467.2. Nucleoredoxin (NXN, Accession NP_071908.1) is another GAM8358 target gene, herein designated TARGET GENE. NXN BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by NXN, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NXN BINDING SITE, designated SEQ ID:18637, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60569] Another function of GAM8358 is therefore inhibition of Nucleoredoxin (NXN, Accession NP_071908.1). Accord-

ingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NXN.

[60570] Ornithine decarboxylase antizyme 3 (OAZ3, Accession NP_057262.1) is another GAM8358 target gene, herein designated TARGET GENE. OAZ3 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by OAZ3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of OAZ3 BINDING SITE, designated SEQ ID:7561, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60571] Another function of GAM8358 is therefore inhibition of Ornithine decarboxylase antizyme 3 (OAZ3, Accession NP_057262.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with OAZ3.

[60572] Outer dense fiber of sperm tails 2 (ODF2, Accession NP_002531.3) is another GAM8358 target gene, herein designated TARGET GENE. ODF2 BINDING SITE is a target binding site found in the 5' untranslated region of multi-

ple transcripts of mRNA encoded by ODF2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ODF2 BINDING SITE, designated SEQ ID:2038, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60573] Another function of GAM8358 is therefore inhibition of Outer dense fiber of sperm tails 2 (ODF2, Accession NP_002531.3), a gene which is very strongly similar to rat Odf2 . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ODF2.

[60574] The function of ODF2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM515.2.Outer dense fiber of sperm tails 2 (ODF2, Accession NP_702915.1) is another GAM8358 target gene, herein designated TARGET GENE. ODF2 BINDING SITE is a target binding site found in the 5` untranslated region of multiple transcripts of mRNA encoded by ODF2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of ODF2 BINDING SITE, designated SEQ ID:2038, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60575] Another function of GAM8358 is therefore inhibition of Outer dense fiber of sperm tails 2 (ODF2, Accession NP_702915.1), a gene which is very strongly similar to rat Odf2 . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ODF2.

[60576] The function of ODF2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM515.2.OIP106 (Accession NP_055780.1) is another GAM8358 target gene, herein designated TARGET GENE. OIP106 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by OIP106, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of OIP106 BINDING SITE, designated SEQ ID:14387, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60577] Another function of GAM8358 is therefore inhibition of OIP106 (Accession NP_055780.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with OIP106.

[60578] Optic atrophy 1 (autosomal dominant) (OPA1, Accession NP_056375.1) is another GAM8358 target gene, herein designated TARGET GENE. OPA1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by OPA1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of OPA1 BINDING SITE, designated SEQ ID:6097, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60579] Another function of GAM8358 is therefore inhibition of Optic atrophy 1 (autosomal dominant) (OPA1, Accession NP_056375.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with OPA1.

[60580] Optic atrophy 1 (autosomal dominant) (OPA1, Accession NP_570850.1) is another GAM8358 target gene, herein designated TARGET GENE. OPA1 BINDING SITE is a target

binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by OPA1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of OPA1 BINDING SITE, designated SEQ ID:6097, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60581] Another function of GAM8358 is therefore inhibition of Optic atrophy 1 (autosomal dominant) (OPA1, Accession NP_570850.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with OPA1.

[60582] Optic atrophy 1 (autosomal dominant) (OPA1, Accession NP_570849.1) is another GAM8358 target gene, herein designated TARGET GENE. OPA1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by OPA1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of OPA1 BINDING SITE, designated SEQ ID:6097, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA,

also designated SEQ ID:255.

[60583] Another function of GAM8358 is therefore inhibition of Optic atrophy 1 (autosomal dominant) (OPA1, Accession NP_570849.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with OPA1.

[60584] Optic atrophy 1 (autosomal dominant) (OPA1, Accession NP_570844.1) is another GAM8358 target gene, herein designated TARGET GENE. OPA1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by OPA1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of OPA1 BINDING SITE, designated SEQ ID:6097, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60585] Another function of GAM8358 is therefore inhibition of Optic atrophy 1 (autosomal dominant) (OPA1, Accession NP_570844.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with OPA1.

[60586] Optic atrophy 1 (autosomal dominant) (OPA1, Accession

NP_570845.1) is another GAM8358 target gene, herein designated TARGET GENE. OPA1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by OPA1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of OPA1 BINDING SITE, designated SEQ ID:6097, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60587] Another function of GAM8358 is therefore inhibition of Optic atrophy 1 (autosomal dominant) (OPA1, Accession NP_570845.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with OPA1.

[60588] Optic atrophy 1 (autosomal dominant) (OPA1, Accession NP_570848.1) is another GAM8358 target gene, herein designated TARGET GENE. OPA1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by OPA1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of OPA1

BINDING SITE, designated SEQ ID:6097, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60589] Another function of GAM8358 is therefore inhibition of Optic atrophy 1 (autosomal dominant) (OPA1, Accession NP_570848.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with OPA1.

[60590] Optic atrophy 1 (autosomal dominant) (OPA1, Accession NP_570847.1) is another GAM8358 target gene, herein designated TARGET GENE. OPA1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by OPA1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of OPA1 BINDING SITE, designated SEQ ID:6097, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60591] Another function of GAM8358 is therefore inhibition of Optic atrophy 1 (autosomal dominant) (OPA1, Accession NP_570847.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical

cal conditions associated with OPA1.

[60592] Optic atrophy 1 (autosomal dominant) (OPA1, Accession NP_570846.1) is another GAM8358 target gene, herein designated TARGET GENE. OPA1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by OPA1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of OPA1 BINDING SITE, designated SEQ ID:6097, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60593] Another function of GAM8358 is therefore inhibition of Optic atrophy 1 (autosomal dominant) (OPA1, Accession NP_570846.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with OPA1.

[60594] OSCAR (Accession NP_573398.1) is another GAM8358 target gene, herein designated TARGET GENE. OSCAR BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by OSCAR, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of OSCAR BINDING SITE, designated SEQ ID:18649, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60595] Another function of GAM8358 is therefore inhibition of OSCAR (Accession NP_573398.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with OSCAR.

[60596] OSCAR (Accession NP_570127.1) is another GAM8358 target gene, herein designated TARGET GENE. OSCAR BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by OSCAR, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of OSCAR BINDING SITE, designated SEQ ID:18649, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60597] Another function of GAM8358 is therefore inhibition of OSCAR (Accession NP_570127.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of

diseases and clinical conditions associated with OSCAR.

[60598] OSCAR (Accession NP_573399.1) is another GAM8358 target gene, herein designated TARGET GENE. OSCAR BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by OSCAR, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of OSCAR BINDING SITE, designated SEQ ID:18649, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60599] Another function of GAM8358 is therefore inhibition of OSCAR (Accession NP_573399.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with OSCAR.

[60600] OTOP3 (Accession XP_292588.2) is another GAM8358 target gene, herein designated TARGET GENE. OTOP3 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by OTOP3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of OTOP3

BINDING SITE, designated SEQ ID:13034, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60601] Another function of GAM8358 is therefore inhibition of OTOP3 (Accession XP_292588.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with OTOP3.

[60602] Purinergic receptor p2x, ligand-gated ion channel, 4 (P2RX4, Accession NP_002551.2) is another GAM8358 target gene, herein designated TARGET GENE. P2RX4 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by P2RX4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of P2RX4 BINDING SITE, designated SEQ ID:5900, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60603] Another function of GAM8358 is therefore inhibition of Purinergic receptor p2x, ligand-gated ion channel, 4 (P2RX4, Accession NP_002551.2), a gene which acts as a ligand gated ion channel. Accordingly, utilities of

GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with P2RX4.

[60604] The function of P2RX4 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM212.1. Purinergic receptor p2x, ligand-gated ion channel, 4 (P2RX4, Accession NP_780776.1) is another GAM8358 target gene, herein designated TARGET GENE. P2RX4 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by P2RX4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of P2RX4 BINDING SITE, designated SEQ ID:5900, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60605] Another function of GAM8358 is therefore inhibition of Purinergic receptor p2x, ligand-gated ion channel, 4 (P2RX4, Accession NP_780776.1), a gene which acts as a ligand gated ion channel. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with P2RX4.

[60606] The function of P2RX4 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM212.1. Purinergic receptor p2x, ligand-gated ion channel, 4 (P2RX4, Accession NP_780777.1) is another GAM8358 target gene, herein designated TARGET GENE. P2RX4 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by P2RX4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of P2RX4 BINDING SITE, designated SEQ ID:5900, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60607] Another function of GAM8358 is therefore inhibition of Purinergic receptor p2x, ligand-gated ion channel, 4 (P2RX4, Accession NP_780777.1), a gene which acts as a ligand gated ion channel. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with P2RX4.

[60608] The function of P2RX4 and its association with various diseases and clinical conditions, has been established by

previous studies, as described hereinabove with reference to GAM212.1.Pyrimidinergic receptor p2y, g-protein coupled, 6 (P2RY6, Accession NP_004145.1) is another GAM8358 target gene, herein designated TARGET GENE. P2RY6 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by P2RY6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of P2RY6 BINDING SITE, designated SEQ ID:985, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60609] Another function of GAM8358 is therefore inhibition of Pyrimidinergic receptor p2y, g-protein coupled, 6 (P2RY6, Accession NP_004145.1), a gene which mediates cellular responses to nucleotides. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with P2RY6.

[60610] The function of P2RY6 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM72.1.Pyrimidinergic receptor p2y, g-protein coupled, 6 (P2RY6, Accession NP_789768.1) is another

GAM8358 target gene, herein designated TARGET GENE. P2RY6 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by P2RY6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of P2RY6 BINDING SITE, designated SEQ ID:985, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60611] Another function of GAM8358 is therefore inhibition of Pyrimidinergic receptor p2y, g-protein coupled, 6 (P2RY6, Accession NP_789768.1), a gene which mediates cellular responses to nucleotides. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with P2RY6.

[60612] The function of P2RY6 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM72.1. Pyrimidinergic receptor p2y, g-protein coupled, 6 (P2RY6, Accession NP_789766.1) is another GAM8358 target gene, herein designated TARGET GENE. P2RY6 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA

encoded by P2RY6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of P2RY6 BINDING SITE, designated SEQ ID:985, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60613] Another function of GAM8358 is therefore inhibition of Pyrimidinergic receptor p2y, g-protein coupled, 6 (P2RY6, Accession NP_789766.1), a gene which mediates cellular responses to nucleotides. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with P2RY6.

[60614] The function of P2RY6 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM72.1.P5-1 (Accession NP_006665.1) is another GAM8358 target gene, herein designated TARGET GENE. P5-1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by P5-1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of P5-1 BINDING SITE, designated SEQ ID:18467, to the nu-

cleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60615] Another function of GAM8358 is therefore inhibition of P5-1 (Accession NP_006665.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with P5-1.

[60616] Peptidylglycine alpha-amidating monooxygenase (PAM, Accession NP_055872.1) is another GAM8358 target gene, herein designated TARGET GENE. PAM BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PAM, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PAM BINDING SITE, designated SEQ ID:8824, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60617] Another function of GAM8358 is therefore inhibition of Peptidylglycine alpha-amidating monooxygenase (PAM, Accession NP_055872.1), a gene which converts neuroendocrine peptides to active alpha- amidated products. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions as-

sociated with PAM.

[60618] The function of PAM and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM322.1.PC326 (Accession NP_060912.1) is another GAM8358 target gene, herein designated TARGET GENE. PC326 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by PC326, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PC326 BINDING SITE, designated SEQ ID:13648, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60619] Another function of GAM8358 is therefore inhibition of PC326 (Accession NP_060912.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PC326.

[60620] Protocadherin 17 (PCDH17, Accession NP_055274.2) is another GAM8358 target gene, herein designated TARGET GENE. PCDH17 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by PCDH17, corresponding to a target binding site such as

BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PCDH17 BINDING SITE, designated SEQ ID:14897, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60621] Another function of GAM8358 is therefore inhibition of Protocadherin 17 (PCDH17, Accession NP_055274.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PCDH17.

[60622] Pecanex homolog (drosophila) (PCNX, Accession NP_055797.1) is another GAM8358 target gene, herein designated TARGET GENE. PCNX BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by PCNX, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PCNX BINDING SITE, designated SEQ ID:2623, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60623] Another function of GAM8358 is therefore inhibition of

Pecanex homolog (drosophila) (PCNX, Accession NP_055797.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PCNX.

[60624] Procollagen c–endopeptidase enhancer (PCOLCE, Accession NP_002584.1) is another GAM8358 target gene, herein designated TARGET GENE. PCOLCE BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by PCOLCE, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PCOLCE BINDING SITE, designated SEQ ID:16049, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60625] Another function of GAM8358 is therefore inhibition of Procollagen c–endopeptidase enhancer (PCOLCE, Accession NP_002584.1), a gene which binds to the cooh– terminal propeptide of type i procollagen and enhances procollagen c– proteinase activity. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PCOLCE.

[60626] The function of PCOLCE and its association with various

diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM148.1. Phosphodiesterase 1b, calmodulin-dependent (PDE1B, Accession NP_000915.1) is another GAM8358 target gene, herein designated TARGET GENE. PDE1B BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PDE1B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PDE1B BINDING SITE, designated SEQ ID:11070, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60627] Another function of GAM8358 is therefore inhibition of Phosphodiesterase 1b, calmodulin-dependent (PDE1B, Accession NP_000915.1), a gene which is a Ca^{2+} -calmodulin dependent phosphodiesterase 1B with a preferred substrate of cGMP. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PDE1B.

[60628] The function of PDE1B and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM259.2. Platelet-derived growth factor receptor, beta polypeptide (PDGFRB, Accession NP_002600.1) is another GAM8358 target gene, herein designated TARGET GENE. PDGFRB BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PDGFRB, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PDGFRB BINDING SITE, designated SEQ ID:1574, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60629] Another function of GAM8358 is therefore inhibition of Platelet-derived growth factor receptor, beta polypeptide (PDGFRB, Accession NP_002600.1), a gene which Platelet-derived growth factor receptor beta chain; tyrosine kinase receptor. and therefore may be associated with Chronic myeloproliferative diseases. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of Chronic myeloproliferative diseases, and of other diseases and clinical conditions associated with PDGFRB.

[60630] The function of PDGFRB and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM579.1. Paternally expressed 10 (PEG10, Accession NP_055883.1) is another GAM8358 target gene, herein designated TARGET GENE. PEG10 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PEG10, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PEG10 BINDING SITE, designated SEQ ID:15770, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60631] Another function of GAM8358 is therefore inhibition of Paternally expressed 10 (PEG10, Accession NP_055883.1). Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PEG10.

[60632] Pet112-like (yeast) (PET112L, Accession NP_004555.1) is another GAM8358 target gene, herein designated TARGET GENE. PET112L BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PET112L, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of PET112L BINDING SITE, designated SEQ ID:6659, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

- [60633] Another function of GAM8358 is therefore inhibition of Pet112-like (yeast) (PET112L, Accession NP_004555.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PET112L.
- [60634] Phd finger protein 1 (PHF1, Accession NP_002627.1) is another GAM8358 target gene, herein designated TARGET GENE. PHF1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PHF1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PHF1 BINDING SITE, designated SEQ ID:13506, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.
- [60635] Another function of GAM8358 is therefore inhibition of Phd finger protein 1 (PHF1, Accession NP_002627.1) . Accordingly, utilities of GAM8358 include diagnosis, preven-

tion and treatment of diseases and clinical conditions associated with PHF1.

[60636] PI4KII (Accession NP_060895.1) is another GAM8358 target gene, herein designated TARGET GENE. PI4KII BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PI4KII, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PI4KII BINDING SITE, designated SEQ ID:17573, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60637] Another function of GAM8358 is therefore inhibition of PI4KII (Accession NP_060895.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PI4KII.

[60638] PILRB (Accession NP_038468.3) is another GAM8358 target gene, herein designated TARGET GENE. PILRB BINDING SITE1 and PILRB BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by PILRB, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of

the nucleotide sequences of PILRB BINDING SITE1 and PILRB BINDING SITE2, designated SEQ ID:15545 and SEQ ID:5463 respectively, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60639] Another function of GAM8358 is therefore inhibition of PILRB (Accession NP_038468.3) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PILRB.

[60640] PILRB (Accession NP_778212.2) is another GAM8358 target gene, herein designated TARGET GENE. PILRB BINDING SITE1 and PILRB BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by PILRB, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PILRB BINDING SITE1 and PILRB BINDING SITE2, designated SEQ ID:15545 and SEQ ID:5463 respectively, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60641] Another function of GAM8358 is therefore inhibition of PILRB (Accession NP_778212.2) . Accordingly, utilities of

GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PILRB.

[60642] Pim-2 oncogene (PIM2, Accession NP_006866.1) is another GAM8358 target gene, herein designated TARGET GENE. PIM2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PIM2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PIM2 BINDING SITE, designated SEQ ID:584, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60643] Another function of GAM8358 is therefore inhibition of Pim-2 oncogene (PIM2, Accession NP_006866.1). Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PIM2.

[60644] PIP5K2C (Accession NP_079055.2) is another GAM8358 target gene, herein designated TARGET GENE. PIP5K2C BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PIP5K2C, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of PIP5K2C BINDING SITE, designated SEQ ID:13606, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60645] Another function of GAM8358 is therefore inhibition of PIP5K2C (Accession NP_079055.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PIP5K2C.

[60646] Pleiomorphic adenoma gene-like 1 (PLAGL1, Accession NP_006709.2) is another GAM8358 target gene, herein designated TARGET GENE. PLAGL1 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by PLAGL1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PLAGL1 BINDING SITE, designated SEQ ID:2458, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60647] Another function of GAM8358 is therefore inhibition of Pleiomorphic adenoma gene-like 1 (PLAGL1, Accession NP_006709.2), a gene which regulates apoptosis and cell

cycle arrest. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PLAGL1.

[60648] The function of PLAGL1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM96.1. Promyelocytic leukemia (PML, Accession NP_150245.1) is another GAM8358 target gene, herein designated TARGET GENE. PML BINDING SITE1 and PML BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by PML, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PML BINDING SITE1 and PML BINDING SITE2, designated SEQ ID:1247 and SEQ ID:1247 respectively, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60649] Another function of GAM8358 is therefore inhibition of Promyelocytic leukemia (PML, Accession NP_150245.1). Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PML.

[60650] Promyelocytic leukemia (PML, Accession NP_150242.1) is another GAM8358 target gene, herein designated TARGET GENE. PML BINDING SITE1 and PML BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by PML, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PML BINDING SITE1 and PML BINDING SITE2, designated SEQ ID:1247 and SEQ ID:1247 respectively, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60651] Another function of GAM8358 is therefore inhibition of Promyelocytic leukemia (PML, Accession NP_150242.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PML.

[60652] Promyelocytic leukemia (PML, Accession NP_150241.1) is another GAM8358 target gene, herein designated TARGET GENE. PML BINDING SITE1 and PML BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by PML, corresponding to target binding sites such as BINDING SITE I, BINDING SITE

II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PML BINDING SITE1 and PML BINDING SITE2, designated SEQ ID:2434 and SEQ ID:1247 respectively, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60653] Another function of GAM8358 is therefore inhibition of Promyelocytic leukemia (PML, Accession NP_150241.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PML.

[60654] Promyelocytic leukemia (PML, Accession NP_150253.1) is another GAM8358 target gene, herein designated TARGET GENE. PML BINDING SITE1 and PML BINDING SITE2 are target binding sites found in untranslated regions of multiple transcripts of mRNA encoded by PML, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PML BINDING SITE1 and PML BINDING SITE2, designated SEQ ID:1247 and SEQ ID:13657 respectively, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60655] Another function of GAM8358 is therefore inhibition of Promyelocytic leukemia (PML, Accession NP_150253.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PML.

[60656] Polymerase (dna directed), theta (POLQ, Accession NP_006587.2) is another GAM8358 target gene, herein designated TARGET GENE. POLQ BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by POLQ, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of POLQ BINDING SITE, designated SEQ ID:2177, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60657] Another function of GAM8358 is therefore inhibition of Polymerase (dna directed), theta (POLQ, Accession NP_006587.2), a gene which enhances untargeted mutagenesis. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with POLQ.

[60658] The function of POLQ and its association with various dis-

eases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM1609.1. POLR3D (Accession NP_001713.1) is another GAM8358 target gene, herein designated TARGET GENE. POLR3D BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by POLR3D, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of POLR3D BINDING SITE, designated SEQ ID:5565, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60659] Another function of GAM8358 is therefore inhibition of POLR3D (Accession NP_001713.1). Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with POLR3D.

[60660] Peptidylprolyl isomerase (cyclophilin)-like 2 (PPIL2, Accession NP_680480.1) is another GAM8358 target gene, herein designated TARGET GENE. PPIL2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PPIL2, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PPIL2 BINDING SITE, designated SEQ ID:13963, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60661] Another function of GAM8358 is therefore inhibition of Peptidylprolyl isomerase (cyclophilin)-like 2 (PPIL2, Accession NP_680480.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PPIL2.

[60662] Protein phosphatase 1e (pp2c domain containing) (PPM1E, Accession NP_055721.3) is another GAM8358 target gene, herein designated TARGET GENE. PPM1E BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PPM1E, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PPM1E BINDING SITE, designated SEQ ID:5899, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60663] Another function of GAM8358 is therefore inhibition of

Protein phosphatase 1e (pp2c domain containing) (PPM1E, Accession NP_055721.3) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PPM1E.

[60664] Protein phosphatase 1, regulatory subunit 3d (PPP1R3D, Accession NP_006233.1) is another GAM8358 target gene, herein designated TARGET GENE. PPP1R3D BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by PPP1R3D, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PPP1R3D BINDING SITE, designated SEQ ID:5493, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60665] Another function of GAM8358 is therefore inhibition of Protein phosphatase 1, regulatory subunit 3d (PPP1R3D, Accession NP_006233.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PPP1R3D.

[60666] Protein phosphatase 3 (formerly 2b), regulatory subunit b, 19kda, alpha isoform (calcineurin b, type i) (PPP3R1, Accession NP_000936.1) is another GAM8358 target gene,

herein designated TARGET GENE. PPP3R1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PPP3R1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PPP3R1 BINDING SITE, designated SEQ ID:3148, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60667] Another function of GAM8358 is therefore inhibition of Protein phosphatase 3 (formerly 2b), regulatory subunit b, 19kda, alpha isoform (calcineurin b, type i) (PPP3R1, Accession NP_000936.1), a gene which is a regulatory subunit of calcineurin, a calcium-dependent, calmodulin stimulated protein phosphatase 3. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PPP3R1.

[60668] The function of PPP3R1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM369.1. Papillary renal cell carcinoma (translocation-associated) (PRCC, Accession NP_005964.2) is another GAM8358 target gene, herein designated TAR-

GET GENE. PRCC BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by PRCC, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PRCC BINDING SITE, designated SEQ ID:9455, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60669] Another function of GAM8358 is therefore inhibition of Papillary renal cell carcinoma (translocation-associated) (PRCC, Accession NP_005964.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PRCC.

[60670] Pr domain containing 7 (PRDM7, Accession NP_443722.1) is another GAM8358 target gene, herein designated TARGET GENE. PRDM7 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PRDM7, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PRDM7 BINDING SITE, designated SEQ ID:4427, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ

ID:255.

[60671] Another function of GAM8358 is therefore inhibition of Pr domain containing 7 (PRDM7, Accession NP_443722.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PRDM7.

[60672] Pr domain containing 9 (PRDM9, Accession NP_064612.1) is another GAM8358 target gene, herein designated TARGET GENE. PRDM9 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PRDM9, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PRDM9 BINDING SITE, designated SEQ ID:4427, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60673] Another function of GAM8358 is therefore inhibition of Pr domain containing 9 (PRDM9, Accession NP_064612.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PRDM9.

[60674] Protein-kinase, interferon-inducible double stranded rna

dependent inhibitor, repressor of (p58 repressor) (PRKRIR, Accession NP_004696.2) is another GAM8358 target gene, herein designated TARGET GENE. PRKRIR BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PRKRIR, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PRKRIR BINDING SITE, designated SEQ ID:2605, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60675] Another function of GAM8358 is therefore inhibition of Protein-kinase, interferon-inducible double stranded rna dependent inhibitor, repressor of (p58 repressor) (PRKRIR, Accession NP_004696.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PRKRIR.

[60676] PRO0461 (Accession NP_112558.1) is another GAM8358 target gene, herein designated TARGET GENE. PRO0461 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by PRO0461, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of PRO0461 BINDING SITE, designated SEQ ID:7800, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60677] Another function of GAM8358 is therefore inhibition of PRO0461 (Accession NP_112558.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PRO0461.

[60678] PRO0650 (Accession NP_054856.1) is another GAM8358 target gene, herein designated TARGET GENE. PRO0650 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by PRO0650, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PRO0650 BINDING SITE, designated SEQ ID:12955, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60679] Another function of GAM8358 is therefore inhibition of PRO0650 (Accession NP_054856.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

PRO0650.

[60680] Proteasome (prosome, macropain) subunit, alpha type, 5 (PSMA5, Accession NP_002781.2) is another GAM8358 target gene, herein designated TARGET GENE. PSMA5 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by PSMA5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PSMA5 BINDING SITE, designated SEQ ID:11290, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60681] Another function of GAM8358 is therefore inhibition of Proteasome (prosome, macropain) subunit, alpha type, 5 (PSMA5, Accession NP_002781.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PSMA5.

[60682] Phosphatidylserine synthase 2 (PTDSS2, Accession NP_110410.1) is another GAM8358 target gene, herein designated TARGET GENE. PTDSS2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PTDSS2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or

BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PTDSS2 BINDING SITE, designated SEQ ID:14935, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60683] Another function of GAM8358 is therefore inhibition of Phosphatidylserine synthase 2 (PTDSS2, Accession NP_110410.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PTDSS2.

[60684] Prostaglandin i2 (prostacyclin) synthase (PTGIS, Accession NP_000952.1) is another GAM8358 target gene, herein designated TARGET GENE. PTGIS BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by PTGIS, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PTGIS BINDING SITE, designated SEQ ID:3522, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60685] Another function of GAM8358 is therefore inhibition of Prostaglandin i2 (prostacyclin) synthase (PTGIS, Accession

NP_000952.1), a gene which catalyzes the isomerization of prostaglandin h2 to prostacyclin (= prostaglandin i2). Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PTGIS.

[60686] The function of PTGIS and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1. Phosphorylase, glycogen; muscle (mc ardle syndrome, glycogen storage disease type v) (PYGM, Accession NP_005600.1) is another GAM8358 target gene, herein designated TARGET GENE. PYGM BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by PYGM, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PYGM BINDING SITE, designated SEQ ID:6017, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60687] Another function of GAM8358 is therefore inhibition of Phosphorylase, glycogen; muscle (mc ardle syndrome, glycogen storage disease type v) (PYGM, Accession

NP_005600.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PYGM.

[60688] RAB2B (Accession NP_116235.2) is another GAM8358 target gene, herein designated TARGET GENE. RAB2B BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RAB2B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RAB2B BINDING SITE, designated SEQ ID:19612, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60689] Another function of GAM8358 is therefore inhibition of RAB2B (Accession NP_116235.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RAB2B.

[60690] Rab36, member ras oncogene family (RAB36, Accession NP_004905.1) is another GAM8358 target gene, herein designated TARGET GENE. RAB36 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RAB36, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III

of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RAB36 BINDING SITE, designated SEQ ID:8203, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60691] Another function of GAM8358 is therefore inhibition of Rab36, member ras oncogene family (RAB36, Accession NP_004905.1), a gene which is involved in protein transport. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RAB36.

[60692] The function of RAB36 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM130.1.Rae1 rna export 1 homolog (s. pombe) (RAE1, Accession NP_003601.1) is another GAM8358 target gene, herein designated TARGET GENE. RAE1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RAE1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RAE1 BINDING SITE, designated SEQ ID:12024, to the nucleotide se-

quence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60693] Another function of GAM8358 is therefore inhibition of Rae1 rna export 1 homolog (s. pombe) (RAE1, Accession NP_003601.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RAE1.

[60694] Recombination activating gene 2 (RAG2, Accession NP_000527.1) is another GAM8358 target gene, herein designated TARGET GENE. RAG2 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by RAG2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RAG2 BINDING SITE, designated SEQ ID:15119, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60695] Another function of GAM8358 is therefore inhibition of Recombination activating gene 2 (RAG2, Accession NP_000527.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RAG2.

[60696] RALGPS1A (Accession NP_055451.1) is another GAM8358 target gene, herein designated TARGET GENE. RALGPS1A BINDING SITE1 and RALGPS1A BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by RALGPS1A, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RALGPS1A BINDING SITE1 and RALGPS1A BINDING SITE2, designated SEQ ID:12537 and SEQ ID:3361 respectively, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60697] Another function of GAM8358 is therefore inhibition of RALGPS1A (Accession NP_055451.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RALGPS1A.

[60698] Ras association (ralgds/af-6) domain family 2 (RASSF2, Accession NP_055552.1) is another GAM8358 target gene, herein designated TARGET GENE. RASSF2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by RASSF2, corresponding to a target binding site such as BINDING SITE

I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RASSF2 BINDING SITE, designated SEQ ID:11773, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60699] Another function of GAM8358 is therefore inhibition of Ras association (ralgds/af-6) domain family 2 (RASSF2, Accession NP_055552.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RASSF2.

[60700] Ras association (ralgds/af-6) domain family 2 (RASSF2, Accession NP_739580.1) is another GAM8358 target gene, herein designated TARGET GENE. RASSF2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by RASSF2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RASSF2 BINDING SITE, designated SEQ ID:11773, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60701] Another function of GAM8358 is therefore inhibition of Ras association (ralgds/af-6) domain family 2 (RASSF2,

Accession NP_739580.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RASSF2.

[60702] Ras association (ralgds/af-6) domain family 2 (RASSF2, Accession NP_739579.1) is another GAM8358 target gene, herein designated TARGET GENE. RASSF2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by RASSF2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RASSF2 BINDING SITE, designated SEQ ID:11773, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60703] Another function of GAM8358 is therefore inhibition of Ras association (ralgds/af-6) domain family 2 (RASSF2, Accession NP_739579.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RASSF2.

[60704] Rna binding motif protein 7 (RBM7, Accession NP_057174.1) is another GAM8358 target gene, herein designated TARGET GENE. RBM7 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA

encoded by RBM7, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RBM7 BINDING SITE, designated SEQ ID:8778, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60705] Another function of GAM8358 is therefore inhibition of Rna binding motif protein 7 (RBM7, Accession NP_057174.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RBM7.

[60706] Retinol dehydrogenase 5 (11-cis and 9-cis) (RDH5, Accession NP_002896.1) is another GAM8358 target gene, herein designated TARGET GENE. RDH5 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by RDH5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RDH5 BINDING SITE, designated SEQ ID:5992, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60707] Another function of GAM8358 is therefore inhibition of Retinol dehydrogenase 5 (11-cis and 9-cis) (RDH5, Accession NP_002896.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RDH5.

[60708] Regulator of g-protein signalling 11 (RGS11, Accession NP_003825.1) is another GAM8358 target gene, herein designated TARGET GENE. RGS11 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RGS11, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RGS11 BINDING SITE, designated SEQ ID:11687, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60709] Another function of GAM8358 is therefore inhibition of Regulator of g-protein signalling 11 (RGS11, Accession NP_003825.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RGS11.

[60710] Ring finger protein 1 (RING1, Accession NP_002922.1) is another GAM8358 target gene, herein designated TARGET

GENE. RING1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RING1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RING1 BINDING SITE, designated SEQ ID:14960, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60711] Another function of GAM8358 is therefore inhibition of Ring finger protein 1 (RING1, Accession NP_002922.1), a gene which involves in transcriptional regulation. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RING1.

[60712] The function of RING1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM44.1.Receptor (tnfrsf)-interacting serine-threonine kinase 1 (RIPK1, Accession NP_003795.1) is another GAM8358 target gene, herein designated TARGET GENE. RIPK1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RIPK1, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RIPK1 BINDING SITE, designated SEQ ID:13476, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60713] Another function of GAM8358 is therefore inhibition of Receptor (tnfrsf)-interacting serine-threonine kinase 1 (RIPK1, Accession NP_003795.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RIPK1.

[60714] Ribonuclease, rnaase a family, 1 (pancreatic) (RNASE1, Accession NP_002924.1) is another GAM8358 target gene, herein designated TARGET GENE. RNASE1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RNASE1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RNASE1 BINDING SITE, designated SEQ ID:1512, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60715] Another function of GAM8358 is therefore inhibition of Ribonuclease, rnaase a family, 1 (pancreatic) (RNASE1, Ac-

cession NP_002924.1), a gene which is a Pancreatic ribonuclease; a pyrimidine-specific endonuclease that generates 2',3'- cyclic phosphate products. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RNASE1.

[60716] The function of RNASE1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM483.1. Ring finger protein 38 (RNF38, Accession NP_073618.2) is another GAM8358 target gene, herein designated TARGET GENE. RNF38 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RNF38, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RNF38 BINDING SITE, designated SEQ ID:2759, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60717] Another function of GAM8358 is therefore inhibition of Ring finger protein 38 (RNF38, Accession NP_073618.2). Accordingly, utilities of GAM8358 include diagnosis, pre-

vention and treatment of diseases and clinical conditions associated with RNF38.

[60718] RNPC4 (Accession NP_060577.2) is another GAM8358 target gene, herein designated TARGET GENE. RNPC4 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by RNPC4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RNPC4 BINDING SITE, designated SEQ ID:18636, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60719] Another function of GAM8358 is therefore inhibition of RNPC4 (Accession NP_060577.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RNPC4.

[60720] RODH (Accession NP_003716.2) is another GAM8358 target gene, herein designated TARGET GENE. RODH BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by RODH, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RODH BIND-

ING SITE, designated SEQ ID:19289, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60721] Another function of GAM8358 is therefore inhibition of RODH (Accession NP_003716.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RODH.

[60722] RP4-622L5 (Accession NP_061991.2) is another GAM8358 target gene, herein designated TARGET GENE. RP4-622L5 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RP4-622L5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RP4-622L5 BINDING SITE, designated SEQ ID:17249, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60723] Another function of GAM8358 is therefore inhibition of RP4-622L5 (Accession NP_061991.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RP4-622L5.

[60724] S100A15 (Accession NP_789793.1) is another GAM8358

target gene, herein designated TARGET GENE. S100A15 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by S100A15, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of S100A15 BINDING SITE, designated SEQ ID:13112, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60725] Another function of GAM8358 is therefore inhibition of S100A15 (Accession NP_789793.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with S100A15.

[60726] SARM1 (Accession NP_055892.1) is another GAM8358 target gene, herein designated TARGET GENE. SARM1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SARM1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SARM1 BINDING SITE, designated SEQ ID:7757, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA,

also designated SEQ ID:255.

[60727] Another function of GAM8358 is therefore inhibition of SARM1 (Accession NP_055892.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SARM1.

[60728] SBZF3 (Accession XP_300732.1) is another GAM8358 target gene, herein designated TARGET GENE. SBZF3 BINDING SITE is a target binding site found in the 5` untranslated region of multiple transcripts of mRNA encoded by SBZF3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SBZF3 BINDING SITE, designated SEQ ID:9443, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60729] Another function of GAM8358 is therefore inhibition of SBZF3 (Accession XP_300732.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SBZF3.

[60730] Sec14-like 1 (*s. cerevisiae*) (SEC14L1, Accession NP_002994.1) is another GAM8358 target gene, herein designated TARGET GENE. SEC14L1 BINDING SITE is a target binding site found in the 3` untranslated region of

mRNA encoded by SEC14L1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SEC14L1 BINDING SITE, designated SEQ ID:13770, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60731] Another function of GAM8358 is therefore inhibition of Sec14-like 1 (*s. cerevisiae*) (SEC14L1, Accession NP_002994.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SEC14L1.

[60732] Serine (or cysteine) proteinase inhibitor, clade b (ovalbumin), member 6 (SERPINB6, Accession NP_004559.3) is another GAM8358 target gene, herein designated TARGET GENE. SERPINB6 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SERPINB6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SERPINB6 BINDING SITE, designated SEQ ID:11491, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA,

also designated SEQ ID:255.

[60733] Another function of GAM8358 is therefore inhibition of Serine (or cysteine) proteinase inhibitor, clade b (ovalbumin), member 6 (SERPINB6, Accession NP_004559.3), a gene which inhibits thrombin. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SERPINB6.

[60734] The function of SERPINB6 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM830.1. Sh3 domain binding glutamic acid-rich protein like (SH3BGRL, Accession NP_003013.1) is another GAM8358 target gene, herein designated TARGET GENE. SH3BGRL BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SH3BGRL, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SH3BGRL BINDING SITE, designated SEQ ID:16703, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60735] Another function of GAM8358 is therefore inhibition of

Sh3 domain binding glutamic acid-rich protein like (SH3BGRL, Accession NP_003013.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SH3BGRL.

[60736] Sh3-domain kinase binding protein 1 (SH3KBP1, Accession NP_114098.1) is another GAM8358 target gene, herein designated TARGET GENE. SH3KBP1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SH3KBP1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SH3KBP1 BINDING SITE, designated SEQ ID:15834, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60737] Another function of GAM8358 is therefore inhibition of Sh3-domain kinase binding protein 1 (SH3KBP1, Accession NP_114098.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SH3KBP1.

[60738] Solute carrier family 25 (mitochondrial carrier; dicarboxylate transporter), member 10 (SLC25A10, Accession

NP_036272.2) is another GAM8358 target gene, herein designated TARGET GENE. SLC25A10 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SLC25A10, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC25A10 BINDING SITE, designated SEQ ID:6324, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60739] Another function of GAM8358 is therefore inhibition of Solute carrier family 25 (mitochondrial carrier; dicarboxylate transporter), member 10 (SLC25A10, Accession NP_036272.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SLC25A10.

[60740] Solute carrier family 25 (mitochondrial carrier; ornithine transporter) member 15 (SLC25A15, Accession NP_055067.1) is another GAM8358 target gene, herein designated TARGET GENE. SLC25A15 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SLC25A15, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or

BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC25A15 BINDING SITE, designated SEQ ID:14932, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60741] Another function of GAM8358 is therefore inhibition of Solute carrier family 25 (mitochondrial carrier; ornithine transporter) member 15 (SLC25A15, Accession NP_055067.1), a gene which participates the ornithine transport across inner mitochondrial membrane, from the cytoplasm to the matrix and therefore is associated with Hyperornithinemia– hyperammonemia– homocitrullinuria syndrome (hhh syndrome). Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of Hyperornithinemia– hyperammonemia– homocitrullinuria syndrome (hhh syndrome), and of other diseases and clinical conditions associated with SLC25A15.

[60742] The function of SLC25A15 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM99.1. Solute carrier family 39 (zinc transporter), member 3 (SLC39A3, Accession NP_653165.1) is another GAM8358 target gene, herein designated TARGET GENE.

SLC39A3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SLC39A3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC39A3 BINDING SITE, designated SEQ ID:11947, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60743] Another function of GAM8358 is therefore inhibition of Solute carrier family 39 (zinc transporter), member 3 (SLC39A3, Accession NP_653165.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SLC39A3.

[60744] Solute carrier family 6 (neurotransmitter transporter, creatine), member 8 (SLC6A8, Accession NP_005620.1) is another GAM8358 target gene, herein designated TARGET GENE. SLC6A8 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SLC6A8, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC6A8 BINDING SITE, designated

SEQ ID:17130, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60745] Another function of GAM8358 is therefore inhibition of Solute carrier family 6 (neurotransmitter transporter, creatine), member 8 (SLC6A8, Accession NP_005620.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SLC6A8.

[60746] Swi/snf related, matrix associated, actin dependent regulator of chromatin, subfamily d, member 2 (SMARCD2, Accession NP_003068.2) is another GAM8358 target gene, herein designated TARGET GENE. SMARCD2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SMARCD2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SMARCD2 BINDING SITE, designated SEQ ID:7747, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60747] Another function of GAM8358 is therefore inhibition of Swi/snf related, matrix associated, actin dependent regu-

lator of chromatin, subfamily d, member 2 (SMARCD2, Accession NP_003068.2), a gene which is involved in chromatin remodeling. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SMARCD2.

[60748] The function of SMARCD2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM537.1. Smith-magenis syndrome chromosome region, candidate 7 (SMCR7, Accession NP_631901.2) is another GAM8358 target gene, herein designated TARGET GENE. SMCR7 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by SMCR7, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SMCR7 BINDING SITE, designated SEQ ID:6215, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60749] Another function of GAM8358 is therefore inhibition of Smith-magenis syndrome chromosome region, candidate 7 (SMCR7, Accession NP_631901.2). Accordingly, utilities

of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SMCR7.

[60750] Smith–magenis syndrome chromosome region, candidate 7 (SMCR7, Accession NP_683684.1) is another GAM8358 target gene, herein designated TARGET GENE. SMCR7 BINDING SITE is a target binding site found in the 3` untranslated region of multiple transcripts of mRNA encoded by SMCR7, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SMCR7 BINDING SITE, designated SEQ ID:6215, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60751] Another function of GAM8358 is therefore inhibition of Smith–magenis syndrome chromosome region, candidate 7 (SMCR7, Accession NP_683684.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SMCR7.

[60752] SMP3 (Accession NP_079439.2) is another GAM8358 target gene, herein designated TARGET GENE. SMP3 BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by SMP3, corresponding to a

target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SMP3 BINDING SITE, designated SEQ ID:2105, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60753] Another function of GAM8358 is therefore inhibition of SMP3 (Accession NP_079439.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SMP3.

[60754] Sry (sex determining region y)-box 12 (SOX12, Accession NP_008874.2) is another GAM8358 target gene, herein designated TARGET GENE. SOX12 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SOX12, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SOX12 BINDING SITE, designated SEQ ID:2490, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60755] Another function of GAM8358 is therefore inhibition of Sry (sex determining region y)-box 12 (SOX12, Accession

NP_008874.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SOX12.

[60756] Sp3 transcription factor (SP3, Accession XP_092672.2) is another GAM8358 target gene, herein designated TARGET GENE. SP3 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by SP3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SP3 BINDING SITE, designated SEQ ID:18359, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60757] Another function of GAM8358 is therefore inhibition of Sp3 transcription factor (SP3, Accession XP_092672.2), a gene which binds to gt and gc boxes promoters elements. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SP3.

[60758] The function of SP3 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM96.1.Sialophorin (gp115, leukosialin, cd43) (SPN,

Accession NP_003114.1) is another GAM8358 target gene, herein designated TARGET GENE. SPN BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by SPN, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SPN BINDING SITE, designated SEQ ID:15664, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60759] Another function of GAM8358 is therefore inhibition of Sialophorin (gpl115, leukosialin, cd43) (SPN, Accession NP_003114.1), a gene which plays a role in the physico-chemical properties of the t- cell surface and in lectin binding. presents carbohydrate ligands to selectins. . and therefore may be associated with Wiskott- aldrich syndrome. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of Wiskott- aldrich syndrome, and of other diseases and clinical conditions associated with SPN.

[60760] The function of SPN and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM130.1.Spectrin, beta, non-erythrocytic 4 (SPTBN4, Accession NP_079489.1) is another GAM8358 target gene, herein designated TARGET GENE. SPTBN4 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SPTBN4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SPTBN4 BINDING SITE, designated SEQ ID:14455, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60761] Another function of GAM8358 is therefore inhibition of Spectrin, beta, non-erythrocytic 4 (SPTBN4, Accession NP_079489.1), a gene which is critical for the maintenance of plasma membrane shape and lipid asymmetry. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SPTBN4.

[60762] The function of SPTBN4 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM347.2.Sulfotransferase family, cytosolic, 1c, member 2 (SULT1C2, Accession NP_006579.2) is another

GAM8358 target gene, herein designated TARGET GENE. SULT1C2 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by SULT1C2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SULT1C2 BINDING SITE, designated SEQ ID:17465, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60763] Another function of GAM8358 is therefore inhibition of Sulfotransferase family, cytosolic, 1c, member 2 (SULT1C2, Accession NP_006579.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SULT1C2.

[60764] Synapsin iii (SYN3, Accession NP_598344.1) is another GAM8358 target gene, herein designated TARGET GENE. SYN3 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by SYN3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SYN3 BINDING SITE, designated

SEQ ID:2991, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60765] Another function of GAM8358 is therefore inhibition of Synapsin iii (SYN3, Accession NP_598344.1), a gene which may be involved in the regulation of neurotransmitter release and synaptogenesis. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SYN3.

[60766] The function of SYN3 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM1089.2. Synapsin iii (SYN3, Accession NP_003481.2) is another GAM8358 target gene, herein designated TARGET GENE. SYN3 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by SYN3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SYN3 BINDING SITE, designated SEQ ID:2991, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60767] Another function of GAM8358 is therefore inhibition of Synapsin iii (SYN3, Accession NP_003481.2), a gene which may be involved in the regulation of neurotransmitter release and synaptogenesis. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SYN3.

[60768] The function of SYN3 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM1089.2. Synapsin iii (SYN3, Accession NP_598343.1) is another GAM8358 target gene, herein designated TARGET GENE. SYN3 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by SYN3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SYN3 BINDING SITE, designated SEQ ID:2991, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60769] Another function of GAM8358 is therefore inhibition of Synapsin iii (SYN3, Accession NP_598343.1), a gene which may be involved in the regulation of neurotransmitter re-

lease and synaptogenesis. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SYN3.

[60770] The function of SYN3 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM1089.2.Tar (hiv) rna binding protein 2 (TARBP2, Accession NP_599151.1) is another GAM8358 target gene, herein designated TARGET GENE. TARBP2 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by TARBP2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TARBP2 BINDING SITE, designated SEQ ID:15955, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60771] Another function of GAM8358 is therefore inhibition of Tar (hiv) rna binding protein 2 (TARBP2, Accession NP_599151.1), a gene which is involved in the regulation of HIV replication. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TARBP2.

[60772] The function of TARBP2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM309.1. Tar (hiv) rna binding protein 2 (TARBP2, Accession NP_599150.1) is another GAM8358 target gene, herein designated TARGET GENE. TARBP2 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by TARBP2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TARBP2 BINDING SITE, designated SEQ ID:15955, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60773] Another function of GAM8358 is therefore inhibition of Tar (hiv) rna binding protein 2 (TARBP2, Accession NP_599150.1), a gene which is involved in the regulation of HIV replication. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TARBP2.

[60774] The function of TARBP2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM309.1.Transducin (beta)-like 2 (TBL2, Accession NP_116783.1) is another GAM8358 target gene, herein designated TARGET GENE. TBL2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by TBL2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TBL2 BINDING SITE, designated SEQ ID:4498, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60775] Another function of GAM8358 is therefore inhibition of Transducin (beta)-like 2 (TBL2, Accession NP_116783.1), a gene which is of unknown function. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TBL2.

[60776] The function of TBL2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM467.2.Transcription factor 6-like 1 (mitochondrial transcription factor 1-like) (TCF6L1, Accession NP_003192.1) is another GAM8358 target gene, herein designated TARGET GENE. TCF6L1 BINDING SITE is a tar-

get binding site found in the 5` untranslated region of mRNA encoded by TCF6L1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TCF6L1 BINDING SITE, designated SEQ ID:4205, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60777] Another function of GAM8358 is therefore inhibition of Transcription factor 6-like 1 (mitochondrial transcription factor 1-like) (TCF6L1, Accession NP_003192.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TCF6L1.

[60778] Treacher collins-franceschetti syndrome 1 (TCOF1, Accession NP_000347.1) is another GAM8358 target gene, herein designated TARGET GENE. TCOF1 BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by TCOF1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TCOF1 BINDING SITE, designated SEQ ID:12390, to the nucleotide se-

quence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60779] Another function of GAM8358 is therefore inhibition of Treacher collins-franceschetti syndrome 1 (TCOF1, Accession NP_000347.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TCOF1.

[60780] Tgfb1-induced anti-apoptotic factor 1 (TIAF1, Accession NP_510880.2) is another GAM8358 target gene, herein designated TARGET GENE. TIAF1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by TIAF1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TIAF1 BINDING SITE, designated SEQ ID:16620, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60781] Another function of GAM8358 is therefore inhibition of Tgfb1-induced anti-apoptotic factor 1 (TIAF1, Accession NP_510880.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TIAF1.

[60782] Tgfb1-induced anti-apoptotic factor 1 (TIAF1, Accession NP_004731.2) is another GAM8358 target gene, herein designated TARGET GENE. TIAF1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by TIAF1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TIAF1 BINDING SITE, designated SEQ ID:16620, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60783] Another function of GAM8358 is therefore inhibition of Tgfb1-induced anti-apoptotic factor 1 (TIAF1, Accession NP_004731.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TIAF1.

[60784] Thyroid transcription factor 1 (TITF1, Accession NP_003308.1) is another GAM8358 target gene, herein designated TARGET GENE. TITF1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TITF1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the

nucleotide sequences of TITF1 BINDING SITE, designated SEQ ID:11075, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60785] Another function of GAM8358 is therefore inhibition of Thyroid transcription factor 1 (TITF1, Accession NP_003308.1), a gene which plays a role in thyroid and lung development; and surfactant homeostasis and therefore may be associated with Thyroglobulin defect. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of Thyroglobulin defect, and of other diseases and clinical conditions associated with TITF1.

[60786] The function of TITF1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM148.2. Thymidine kinase 2, mitochondrial (TK2, Accession NP_004605.1) is another GAM8358 target gene, herein designated TARGET GENE. TK2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TK2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TK2 BINDING SITE, design-

nated SEQ ID:9571, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60787] Another function of GAM8358 is therefore inhibition of Thymidine kinase 2, mitochondrial (TK2, Accession NP_004605.1), a gene which phosphorylates thymidine, deoxycytidine, deoxyuridine, and also anti-viral and anti-cancer nucleoside analogs and therefore may be associated with Mitochondrial dna depletion myopathy. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of Mitochondrial dna depletion myopathy, and of other diseases and clinical conditions associated with TK2.

[60788] The function of TK2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM281.1. Talin 1 (TLN1, Accession NP_006280.2) is another GAM8358 target gene, herein designated TARGET GENE. TLN1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TLN1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide se-

quences of TLN1 BINDING SITE, designated SEQ ID:2014, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60789] Another function of GAM8358 is therefore inhibition of Talin 1 (TLN1, Accession NP_006280.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TLN1.

[60790] Trinucleotide repeat containing 4 (TNRC4, Accession NP_009116.2) is another GAM8358 target gene, herein designated TARGET GENE. TNRC4 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TNRC4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TNRC4 BINDING SITE, designated SEQ ID:3329, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60791] Another function of GAM8358 is therefore inhibition of Trinucleotide repeat containing 4 (TNRC4, Accession NP_009116.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clini-

cal conditions associated with TNRC4.

[60792] TP53I5 (Accession XP_290532.2) is another GAM8358 target gene, herein designated TARGET GENE. TP53I5 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by TP53I5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TP53I5 BINDING SITE, designated SEQ ID:19129, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60793] Another function of GAM8358 is therefore inhibition of TP53I5 (Accession XP_290532.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TP53I5.

[60794] Tnf receptor-associated factor 5 (TRAF5, Accession NP_004610.1) is another GAM8358 target gene, herein designated TARGET GENE. TRAF5 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by TRAF5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

TRAF5 BINDING SITE, designated SEQ ID:12305, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60795] Another function of GAM8358 is therefore inhibition of Tnf receptor-associated factor 5 (TRAF5, Accession NP_004610.1), a gene which Member of a family of proteins that interact with TNF receptors; binds the lymphotoxin beta receptor (LTBR). Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TRAF5.

[60796] The function of TRAF5 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM69.2. Tnf receptor-associated factor 5 (TRAF5, Accession NP_665702.1) is another GAM8358 target gene, herein designated TARGET GENE. TRAF5 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by TRAF5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TRAF5 BINDING SITE, designated SEQ ID:12305, to the nucleotide sequence of GAM8358 RNA, herein designated

GAM RNA, also designated SEQ ID:255.

[60797] Another function of GAM8358 is therefore inhibition of Tnf receptor-associated factor 5 (TRAF5, Accession NP_665702.1), a gene which Member of a family of proteins that interact with TNF receptors; binds the lymphotoxin beta receptor (LTBR). Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TRAF5.

[60798] The function of TRAF5 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM69.2. TRAM2 (Accession NP_036420.1) is another GAM8358 target gene, herein designated TARGET GENE. TRAM2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TRAM2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TRAM2 BINDING SITE, designated SEQ ID:5325, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60799] Another function of GAM8358 is therefore inhibition of TRAM2 (Accession NP_036420.1) . Accordingly, utilities of

GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TRAM2.

[60800] Tripartite motif-containing 29 (TRIM29, Accession NP_036233.2) is another GAM8358 target gene, herein designated TARGET GENE. TRIM29 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by TRIM29, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TRIM29 BINDING SITE, designated SEQ ID:673, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60801] Another function of GAM8358 is therefore inhibition of Tripartite motif-containing 29 (TRIM29, Accession NP_036233.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TRIM29.

[60802] TRIM47 (Accession XP_290731.1) is another GAM8358 target gene, herein designated TARGET GENE. TRIM47 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TRIM47, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TRIM47 BINDING SITE, designated SEQ ID:3214, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60803] Another function of GAM8358 is therefore inhibition of TRIM47 (Accession XP_290731.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TRIM47.

[60804] Ubiquitin-conjugating enzyme e2q (putative) (UBE2Q, Accession NP_060052.3) is another GAM8358 target gene, herein designated TARGET GENE. UBE2Q BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by UBE2Q, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of UBE2Q BINDING SITE, designated SEQ ID:13750, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60805] Another function of GAM8358 is therefore inhibition of Ubiquitin-conjugating enzyme e2q (putative) (UBE2Q, Accession NP_060052.3) . Accordingly, utilities of GAM8358

include diagnosis, prevention and treatment of diseases and clinical conditions associated with UBE2Q.

[60806] Usher syndrome 1g (autosomal recessive) (USH1G, Accession NP_775748.1) is another GAM8358 target gene, herein designated TARGET GENE. USH1G BINDING SITE1 and USH1G BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by USH1G, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of USH1G BINDING SITE1 and USH1G BINDING SITE2, designated SEQ ID:12873 and SEQ ID:4086 respectively, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60807] Another function of GAM8358 is therefore inhibition of Usher syndrome 1g (autosomal recessive) (USH1G, Accession NP_775748.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with USH1G.

[60808] Vang-like 2 (van gogh, drosophila) (VANGL2, Accession XP_049695.4) is another GAM8358 target gene, herein designated TARGET GENE. VANGL2 BINDING SITE is a target binding site found in the 3' untranslated region of

mRNA encoded by VANGL2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of VANGL2 BINDING SITE, designated SEQ ID:17930, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60809] Another function of GAM8358 is therefore inhibition of Vang-like 2 (van gogh, drosophila) (VANGL2, Accession XP_049695.4), a gene which may take part in defining the lateral boundary of floorplate differentiation and therefore may be associated with Neural tube defects. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of Neural tube defects, and of other diseases and clinical conditions associated with VANGL2.

[60810] The function of VANGL2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM47.1. Vesicle amine transport protein 1 homolog (t californica) (VAT1, Accession NP_006364.2) is another GAM8358 target gene, herein designated TARGET GENE. VAT1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by VAT1, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of VAT1 BINDING SITE, designated SEQ ID:7020, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60811] Another function of GAM8358 is therefore inhibition of Vesicle amine transport protein 1 homolog (t californica) (VAT1, Accession NP_006364.2), a gene which is a membrane protein of cholinergic synaptic vesicles. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with VAT1.

[60812] The function of VAT1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM330.2. Von willebrand factor (VWF, Accession NP_000543.1) is another GAM8358 target gene, herein designated TARGET GENE. VWF BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by VWF, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the

nucleotide sequences of VWF BINDING SITE, designated SEQ ID:13033, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60813] Another function of GAM8358 is therefore inhibition of Von willebrand factor (VWF, Accession NP_000543.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with VWF.

[60814] WDR22 (Accession XP_031102.1) is another GAM8358 target gene, herein designated TARGET GENE. WDR22 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by WDR22, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of WDR22 BINDING SITE, designated SEQ ID:16841, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60815] Another function of GAM8358 is therefore inhibition of WDR22 (Accession XP_031102.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with WDR22.

[60816] Wd repeat domain 7 (WDR7, Accession NP_056100.1) is another GAM8358 target gene, herein designated TARGET GENE. WDR7 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by WDR7, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of WDR7 BINDING SITE, designated SEQ ID:570, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60817] Another function of GAM8358 is therefore inhibition of Wd repeat domain 7 (WDR7, Accession NP_056100.1). Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with WDR7.

[60818] Wd repeat domain 7 (WDR7, Accession NP_443066.1) is another GAM8358 target gene, herein designated TARGET GENE. WDR7 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by WDR7, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity

ity of the nucleotide sequences of WDR7 BINDING SITE, designated SEQ ID:570, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60819] Another function of GAM8358 is therefore inhibition of Wd repeat domain 7 (WDR7, Accession NP_443066.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with WDR7.

[60820] Wd repeat domain 9 (WDR9, Accession NP_061836.2) is another GAM8358 target gene, herein designated TARGET GENE. WDR9 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by WDR9, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of WDR9 BINDING SITE, designated SEQ ID:15650, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60821] Another function of GAM8358 is therefore inhibition of Wd repeat domain 9 (WDR9, Accession NP_061836.2) . Accordingly, utilities of GAM8358 include diagnosis, pre-

vention and treatment of diseases and clinical conditions associated with WDR9.

[60822] Wolfram syndrome 1 (wolframin) (WFS1, Accession NP_005996.1) is another GAM8358 target gene, herein designated TARGET GENE. WFS1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by WFS1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of WFS1 BINDING SITE, designated SEQ ID:6581, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60823] Another function of GAM8358 is therefore inhibition of Wolfram syndrome 1 (wolframin) (WFS1, Accession NP_005996.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with WFS1.

[60824] Winged-helix nude (WHN, Accession NP_003584.2) is another GAM8358 target gene, herein designated TARGET GENE. WHN BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by WHN, corresponding to a target binding site such as BINDING

SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of WHN BINDING SITE, designated SEQ ID:18123, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60825] Another function of GAM8358 is therefore inhibition of Winged-helix nude (WHN, Accession NP_003584.2), a gene which plays a role in transcriptional regulation and therefore may be associated with T- cell immunodeficiency, the skin disorder congenital alopecia, and nail dystrophy. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of T- cell immunodeficiency, the skin disorder congenital alopecia, and nail dystrophy., and of other diseases and clinical conditions associated with WHN.

[60826] The function of WHN and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM40.1.Wolf-hirschhorn syndrome candidate 1-like 1 (WHSC1L1, Accession NP_060248.2) is another GAM8358 target gene, herein designated TARGET GENE. WHSC1L1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded

by WHSC1L1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of WHSC1L1 BINDING SITE, designated SEQ ID:1808, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60827] Another function of GAM8358 is therefore inhibition of Wolf-hirschhorn syndrome candidate 1-like 1 (WHSC1L1, Accession NP_060248.2), a gene which restores repair of base- base and single- nucleotide insertion- deletion mismatches, and increases the proficiency to process heteroduplexes with insertion- deletion mismatches. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with WHSC1L1.

[60828] The function of WHSC1L1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM412.1.WSB2 (Accession NP_061109.1) is another GAM8358 target gene, herein designated TARGET GENE. WSB2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by WSB2, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of WSB2 BINDING SITE, designated SEQ ID:17131, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60829] Another function of GAM8358 is therefore inhibition of WSB2 (Accession NP_061109.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with WSB2.

[60830] Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, beta polypeptide (YWHAB, Accession NP_647539.1) is another GAM8358 target gene, herein designated TARGET GENE. YWHAB BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by YWHAB, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of YWHAB BINDING SITE, designated SEQ ID:8275, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60831] Another function of GAM8358 is therefore inhibition of Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, beta polypeptide (YWHAB, Accession NP_647539.1), a gene which activates tyrosine and tryptophan hydroxylases in the presence of protein kinase ii, and strongly activates protein kinase c. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with YWHAB.

[60832] The function of YWHAB and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM374.2. Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, beta polypeptide (YWHAB, Accession NP_003395.1) is another GAM8358 target gene, herein designated TARGET GENE. YWHAB BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by YWHAB, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of YWHAB BINDING SITE, designated SEQ ID:8275, to the nucleotide sequence of GAM8358

RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60833] Another function of GAM8358 is therefore inhibition of Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, beta polypeptide (YWHAB, Accession NP_003395.1), a gene which activates tyrosine and tryptophan hydroxylases in the presence of protein kinase ii, and strongly activates protein kinase c. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with YWHAB.

[60834] The function of YWHAB and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM374.2. Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, beta polypeptide (YWHAB, Accession NP_003395.1) is another GAM8358 target gene, herein designated TARGET GENE. YWHAB BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by YWHAB, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of YWHAB BINDING SITE, designated SEQ ID:8275, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60835] Another function of GAM8358 is therefore inhibition of Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, beta polypeptide (YWHAB, Accession NP_003395.1), a gene which activates tyrosine and tryptophan hydroxylases in the presence of protein kinase ii, and strongly activates protein kinase c. Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with YWHAB.

[60836] The function of YWHAB and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM374.2.ZDHHC14 (Accession NP_714968.1) is another GAM8358 target gene, herein designated TARGET GENE. ZDHHC14 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by ZDHHC14, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the comple-

mentarity of the nucleotide sequences of ZDHHC14 BINDING SITE, designated SEQ ID:11339, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60837] Another function of GAM8358 is therefore inhibition of ZDHHC14 (Accession NP_714968.1) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZDHHC14.

[60838] ZDHHC14 (Accession NP_078906.2) is another GAM8358 target gene, herein designated TARGET GENE. ZDHHC14 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by ZDHHC14, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZDHHC14 BINDING SITE, designated SEQ ID:11339, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60839] Another function of GAM8358 is therefore inhibition of ZDHHC14 (Accession NP_078906.2) . Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment

of diseases and clinical conditions associated with ZD-HHC14.

[60840] Zinc finger protein 302 (ZNF302, Accession NP_061145.1) is another GAM8358 target gene, herein designated TARGET GENE. ZNF302 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by ZNF302, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF302 BINDING SITE, designated SEQ ID:15235, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60841] Another function of GAM8358 is therefore inhibition of Zinc finger protein 302 (ZNF302, Accession NP_061145.1). Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF302.

[60842] Zinc finger protein 302 (ZNF302, Accession NP_060913.1) is another GAM8358 target gene, herein designated TARGET GENE. ZNF302 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by ZNF302, corresponding to a target

binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF302 BINDING SITE, designated SEQ ID:15235, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60843] Another function of GAM8358 is therefore inhibition of Zinc finger protein 302 (ZNF302, Accession NP_060913.1). Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF302.

[60844] Zinc finger protein 313 (ZNF313, Accession NP_061153.1) is another GAM8358 target gene, herein designated TARGET GENE. ZNF313 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZNF313, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF313 BINDING SITE, designated SEQ ID:13901, to the nucleotide sequence of GAM8358 RNA, herein designated GAM RNA, also designated SEQ ID:255.

[60845] Another function of GAM8358 is therefore inhibition of

Zinc finger protein 313 (ZNF313, Accession NP_061153.1). Accordingly, utilities of GAM8358 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF313.

[60846]

[60847] Fig. 8 further provides a conceptual description of a novel bioinformatically detected of the present invention, referred to here as Genomic Address Messenger 8554 (GAM8554), which modulates expression of respective target genes thereof, the function and utility of which target genes is known in the art.

[60848] GAM8554 is a novel bioinformatically detected regulatory, non protein coding, micro RNA (miRNA) gene. The method by which GAM8554 was detected is described hereinabove with reference to Figs. 8–15.

[60849] GAM8554 gene, herein designated GAM GENE, and GAM8554 target gene, herein designated TARGET GENE, are human genes contained in the human genome.

[60850] GAM8554 gene encodes a GAM8554 precursor RNA, herein designated GAM PRECURSOR RNA. Similar to other miRNA genes, and unlike most ordinary genes, GAM8554 precursor RNA does not encode a protein. A nucleotide sequence identical or highly similar to the nucleotide se–

quence of GAM8554 precursor RNA is designated SEQ ID:1, and is provided hereinbelow with reference to the sequence listing part.

[60851] GAM8554 precursor RNA folds onto itself, forming GAM8554 folded precursor RNA, herein designated GAM FOLDED PRECURSOR RNA, which has a two-dimensional `hairpin structure`. As is well known in the art, this `hairpin structure`, is typical of RNA encoded by miRNA genes, and is due to the fact that the nucleotide sequence of the first half of the RNA encoded by a miRNA gene is an accurate or partial inversed-reversed sequence of the nucleotide sequence of the second half thereof.

[60852] GAM8554 precursor RNA folds onto itself, forming GAM8554 folded precursor RNA, herein designated GAM FOLDED PRECURSOR RNA, which has a two-dimensional `hairpin structure`. As is well known in the art, this `hairpin structure`, is typical of RNA encoded by miRNA genes, and is due to the fact that the nucleotide sequence of the first half of the RNA encoded by a miRNA gene is an accurate or partial reverse-complementary sequence of the nucleotide sequence of the second half thereof.

[60853] Nucleotide sequence of GAM8554 precursor RNA, designated SEQ-ID: 1, and a schematic representation of a pre-

dicted secondary folding of GAM8554 folded precursor RNA are further described with reference to Table 2, hereby incorporated by reference.

[60854] An enzyme complex designated DICER COMPLEX, `dices` the GAM8554 folded precursor RNA into GAM8554 RNA, herein designated GAM RNA, a single stranded ~22 nt long RNA segment. As is known in the art, `dicing` of a hairpin structured RNA precursor product into a short ~22nt RNA segment is catalyzed by an enzyme complex comprising an enzyme called Dicer together with other necessary proteins. A probable (GAM Prediction Accuracy Group: B) nucleotide sequence of GAM8554 RNA is designated SEQ ID:388, and is provided hereinbelow with references to the sequence listing part and Table 3, hereby incorporated by reference.

[60855] GAM8554 target gene, herein designated TARGET GENE, encodes a corresponding messenger RNA, GAM8554 target RNA, herein designated GAM TARGET RNA. GAM8554 target RNA comprises three regions, as is typical of mRNA of a protein coding gene: a 5` untranslated region, a protein coding region and a 3` untranslated region, designated 5`UTR, PROTEIN CODING and 3`UTR respectively.

[60856] GAM8554 RNA, herein designated GAM RNA, binds com-

plementarily to one or more target binding sites located in untranslated regions of GAM8554 target RNA, herein designated GAM TARGET RNA. This complementary binding is due to the fact that the nucleotide sequence of GAM8554 RNA is an accurate or a partial inversed-reversed sequence of the nucleotide sequence of each of the target binding sites. As an illustration, Fig. 8 shows three such target binding sites, designated BINDING SITE I, BINDING SITE II and BINDING SITE III respectively. It is appreciated that the number of target binding sites shown in Fig. 8 is meant as an illustration only, and is not meant to be limiting. GAM8554 RNA may have a different number of target binding sites in untranslated regions of a GAM8554 target RNA. It is further appreciated that while Fig. 8 depicts target binding sites in the 3'UTR region, this is meant as an example only. These target binding sites may be located in the 3'UTR region, the 5'UTR region, or in both 3'UTR and 5'UTR regions.

[60857] The complementary binding of GAM8554 RNA, herein designated GAM RNA, to target binding sites on GAM8554 target RNA, herein designated GAM TARGET RNA, such as BINDING SITE I, BINDING SITE II and BINDING SITE III, inhibits translation of GAM8554 target RNA into GAM8554

target protein, herein designated GAM TARGET PROTEIN.
GAM target protein is therefore outlined by a broken line.

[60858] It is appreciated that GAM8554 target gene, herein designated TARGET GENE, in fact represents a plurality of GAM8554 target genes. The mRNA of each one of this plurality of GAM8554 target genes comprises one or more target binding sites, each having a nucleotide sequence which is at least partly complementary to GAM8554 RNA, herein designated GAM RNA, and which when bound by GAM8554 RNA causes inhibition of translation of respective one or more GAM8554 target proteins.

[60859] It is further appreciated by one skilled in the art that the mode of translational inhibition illustrated by Fig. 8 with specific reference to translational inhibition exerted by GAM8554 gene, herein designated GAM GENE, on one or more GAM8554 target genes, herein collectively designated TARGET GENE, is common to other known miRNA genes. As mentioned hereinabove with reference to the background section, although a specific complementary binding site has been demonstrated only for some of the known miRNA genes (primarily Lin-4 and Let-7), all other recently discovered miRNA genes are also believed by those skilled in the art to modulate expression of other

genes by complementary binding, although specific complementary binding sites of these other miRNA genes have not yet been found (Ruvkun G., Perspective: Glimpses of a tiny RNA world, Science 294,779 (2001)).

[60860] It is appreciated that specific functions and accordingly utilities of GAM8554 correlate with, and may be deduced from, the identity of the target genes which GAM8554 binds and inhibits, and the function of these target genes, as elaborated hereinbelow.

[60861]

[60862]

[60863] V-abl abelson murine leukemia viral oncogene homolog 1 (ABL1, Accession NP_005148.1) is a GAM8554 target gene, herein designated TARGET GENE. ABL1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by ABL1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ABL1 BINDING SITE, designated SEQ ID:4735, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60864] A function of GAM8554 is therefore inhibition of V-abl abelson murine leukemia viral oncogene homolog 1 (ABL1, Accession NP_005148.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ABL1.

[60865] V-abl abelson murine leukemia viral oncogene homolog 1 (ABL1, Accession NP_009297.1) is another GAM8554 target gene, herein designated TARGET GENE. ABL1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by ABL1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ABL1 BINDING SITE, designated SEQ ID:4735, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60866] Another function of GAM8554 is therefore inhibition of V-abl abelson murine leukemia viral oncogene homolog 1 (ABL1, Accession NP_009297.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ABL1.

[60867] Afg3 atpase family gene 3-like 1 (yeast) (AFG3L1, Accession NP_001123.1) is another GAM8554 target gene,

herein designated TARGET GENE. AFG3L1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by AFG3L1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of AFG3L1 BINDING SITE, designated SEQ ID:4913, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60868] Another function of GAM8554 is therefore inhibition of Afg3 atpase family gene 3-like 1 (yeast) (AFG3L1, Accession NP_001123.1). Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with AFG3L1.

[60869] Aldehyde dehydrogenase 4 family, member a1 (ALDH4A1, Accession NP_003739.2) is another GAM8554 target gene, herein designated TARGET GENE. ALDH4A1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by ALDH4A1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ALDH4A1 BINDING SITE, designated

SEQ ID:4955, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60870] Another function of GAM8554 is therefore inhibition of Aldehyde dehydrogenase 4 family, member a1 (ALDH4A1, Accession NP_003739.2) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ALDH4A1.

[60871] Aldehyde dehydrogenase 4 family, member a1 (ALDH4A1, Accession NP_733844.1) is another GAM8554 target gene, herein designated TARGET GENE. ALDH4A1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by ALDH4A1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ALDH4A1 BINDING SITE, designated SEQ ID:4955, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60872] Another function of GAM8554 is therefore inhibition of Aldehyde dehydrogenase 4 family, member a1 (ALDH4A1, Accession NP_733844.1) . Accordingly, utilities of

GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ALDH4A1.

[60873] Adaptor-related protein complex 1, gamma 1 subunit (AP1G1, Accession NP_001119.2) is another GAM8554 target gene, herein designated TARGET GENE. AP1G1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by AP1G1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of AP1G1 BINDING SITE, designated SEQ ID:18932, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60874] Another function of GAM8554 is therefore inhibition of Adaptor-related protein complex 1, gamma 1 subunit (AP1G1, Accession NP_001119.2), a gene which promotes the formation of clathrin-coated pits and vesicles. Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with AP1G1.

[60875] The function of AP1G1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM388.2.Adaptor-related protein complex 1, mu 1 subunit (AP1M1, Accession NP_115882.1) is another GAM8554 target gene, herein designated TARGET GENE. AP1M1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by AP1M1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of AP1M1 BINDING SITE, designated SEQ ID:7039, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60876] Another function of GAM8554 is therefore inhibition of Adaptor-related protein complex 1, mu 1 subunit (AP1M1, Accession NP_115882.1), a gene which promotes the formation of clathrin-coated pits and vesicles. Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with AP1M1.

[60877] The function of AP1M1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM130.1.APRG1 (Accession NP_848029.1) is another GAM8554 target gene, herein designated TARGET GENE.

APRG1 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by APRG1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of APRG1 BINDING SITE, designated SEQ ID:9637, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60878] Another function of GAM8554 is therefore inhibition of APRG1 (Accession NP_848029.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with APRG1.

[60879] APRG1 (Accession NP_848028.1) is another GAM8554 target gene, herein designated TARGET GENE. APRG1 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by APRG1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of APRG1 BINDING SITE, designated SEQ ID:9637, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ

ID:388.

[60880] Another function of GAM8554 is therefore inhibition of APRG1 (Accession NP_848028.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with APRG1.

[60881] APRG1 (Accession NP_848032.1) is another GAM8554 target gene, herein designated TARGET GENE. APRG1 BINDING SITE is a target binding site found in the 5` untranslated region of multiple transcripts of mRNA encoded by APRG1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of APRG1 BINDING SITE, designated SEQ ID:9637, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60882] Another function of GAM8554 is therefore inhibition of APRG1 (Accession NP_848032.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with APRG1.

[60883] ARH (Accession NP_056442.1) is another GAM8554 target gene, herein designated TARGET GENE. ARH BINDING SITE is a target binding site found in the 3` untranslated re-

gion of mRNA encoded by ARH, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ARH BINDING SITE, designated SEQ ID:18536, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60884] Another function of GAM8554 is therefore inhibition of ARH (Accession NP_056442.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ARH.

[60885] Adp-ribosylation factor-like 2 (ARL2, Accession NP_001658.1) is another GAM8554 target gene, herein designated TARGET GENE. ARL2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ARL2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ARL2 BINDING SITE, designated SEQ ID:9268, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60886] Another function of GAM8554 is therefore inhibition of

Adp-ribosylation factor-like 2 (ARL2, Accession NP_001658.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ARL2.

[60887] Actin related protein 2/3 complex, subunit 3, 21kda (ARPC3, Accession NP_005710.1) is another GAM8554 target gene, herein designated TARGET GENE. ARPC3 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by ARPC3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ARPC3 BINDING SITE, designated SEQ ID:10193, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60888] Another function of GAM8554 is therefore inhibition of Actin related protein 2/3 complex, subunit 3, 21kda (ARPC3, Accession NP_005710.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ARPC3.

[60889] ASF1B (Accession NP_060624.1) is another GAM8554 target gene, herein designated TARGET GENE. ASF1B BINDING SITE is a target binding site found in the 3` untrans-

lated region of mRNA encoded by ASF1B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ASF1B BINDING SITE, designated SEQ ID:4386, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60890] Another function of GAM8554 is therefore inhibition of ASF1B (Accession NP_060624.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ASF1B.

[60891] Atpase, class v, type 10a (ATP10A, Accession NP_077816.1) is another GAM8554 target gene, herein designated TARGET GENE. ATP10A BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ATP10A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ATP10A BINDING SITE, designated SEQ ID:12086, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60892] Another function of GAM8554 is therefore inhibition of

Atpase, class v, type 10a (ATP10A, Accession NP_077816.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ATP10A.

[60893] Atpase inhibitory factor 1 (ATPIF1, Accession NP_835498.1) is another GAM8554 target gene, herein designated TARGET GENE. ATPIF1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by ATPIF1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ATPIF1 BINDING SITE, designated SEQ ID:19002, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60894] Another function of GAM8554 is therefore inhibition of Atpase inhibitory factor 1 (ATPIF1, Accession NP_835498.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ATPIF1.

[60895] Btb and cnc homology 1, basic leucine zipper transcription factor 2 (BACH2, Accession NP_068585.1) is another GAM8554 target gene, herein designated TARGET GENE.

BACH2 BINDING SITE1 and BACH2 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by BACH2, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BACH2 BINDING SITE1 and BACH2 BINDING SITE2, designated SEQ ID:17751 and SEQ ID:19189 respectively, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60896] Another function of GAM8554 is therefore inhibition of Btb and cnc homology 1, basic leucine zipper transcription factor 2 (BACH2, Accession NP_068585.1), a gene which acts as repressor or activator, binds to maf recognition elements and therefore may be associated with Non-hodgkin lymphoma. Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of Non-hodgkin lymphoma, and of other diseases and clinical conditions associated with BACH2.

[60897] The function of BACH2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM44.1.BOP (Accession XP_097915.2) is another

GAM8554 target gene, herein designated TARGET GENE. BOP BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by BOP, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BOP BINDING SITE, designated SEQ ID:3691, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60898] Another function of GAM8554 is therefore inhibition of BOP (Accession XP_097915.2) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BOP.

[60899] C14orf113 (Accession NP_060100.1) is another GAM8554 target gene, herein designated TARGET GENE. C14orf113 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C14orf113, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C14orf113 BINDING SITE, designated SEQ ID:13492, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60900] Another function of GAM8554 is therefore inhibition of C14orf113 (Accession NP_060100.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C14orf113.

[60901] Chromosome 9 open reading frame 19 (C9orf19, Accession NP_071738.1) is another GAM8554 target gene, herein designated TARGET GENE. C9orf19 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C9orf19, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C9orf19 BINDING SITE, designated SEQ ID:4682, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60902] Another function of GAM8554 is therefore inhibition of Chromosome 9 open reading frame 19 (C9orf19, Accession NP_071738.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C9orf19.

[60903] Chromosome 9 open reading frame 25 (C9orf25, Accession NP_671735.1) is another GAM8554 target gene,

herein designated TARGET GENE. C9orf25 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C9orf25, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C9orf25 BINDING SITE, designated SEQ ID:1932, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60904] Another function of GAM8554 is therefore inhibition of Chromosome 9 open reading frame 25 (C9orf25, Accession NP_671735.1). Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C9orf25.

[60905] Carbonic anhydrase vi (CA6, Accession NP_001206.1) is another GAM8554 target gene, herein designated TARGET GENE. CA6 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CA6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CA6 BINDING SITE, designated SEQ ID:4909, to the nucleotide sequence of GAM8554 RNA, herein design-

nated GAM RNA, also designated SEQ ID:388.

[60906] Another function of GAM8554 is therefore inhibition of Carbonic anhydrase vi (CA6, Accession NP_001206.1), a gene which has a function of reversible hydration of carbon dioxide. Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CA6.

[60907] The function of CA6 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM1617.1. Calcium channel, voltage-dependent, alpha 2/delta subunit 2 (CACNA2D2, Accession NP_006021.1) is another GAM8554 target gene, herein designated TARGET GENE. CACNA2D2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CACNA2D2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CACNA2D2 BINDING SITE, designated SEQ ID:8973, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60908] Another function of GAM8554 is therefore inhibition of

Calcium channel, voltage-dependent, alpha 2/delta sub-unit 2 (CACNA2D2, Accession NP_006021.1), a gene which is a calcium channel protein which plays an important role in excitation-contraction coupling. Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CACNA2D2.

[60909] The function of CACNA2D2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM374.2.CAP350 (Accession NP_055625.2) is another GAM8554 target gene, herein designated TARGET GENE. CAP350 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CAP350, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CAP350 BINDING SITE, designated SEQ ID:11531, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60910] Another function of GAM8554 is therefore inhibition of CAP350 (Accession NP_055625.2). Accordingly, utilities

of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CAP350.

[60911] Caspase 8, apoptosis-related cysteine protease (CASP8, Accession NP_203521.1) is another GAM8554 target gene, herein designated TARGET GENE. CASP8 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CASP8, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CASP8 BINDING SITE, designated SEQ ID:14684, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60912] Another function of GAM8554 is therefore inhibition of Caspase 8, apoptosis-related cysteine protease (CASP8, Accession NP_203521.1), a gene which is an apoptosis-related caspase and an upstream component of Fas receptor and tumor necrosis factor (TNF) receptor-induced apoptosis. and therefore may be associated with Huntington-related neurodegenerative diseases. Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of Huntington-related neurodegenerative dis-

eases, and of other diseases and clinical conditions associated with CASP8.

[60913] The function of CASP8 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM72.1. Chemokine (c-c motif) receptor 7 (CCR7, Accession NP_001829.1) is another GAM8554 target gene, herein designated TARGET GENE. CCR7 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CCR7, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CCR7 BINDING SITE, designated SEQ ID:1279, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60914] Another function of GAM8554 is therefore inhibition of Chemokine (c-c motif) receptor 7 (CCR7, Accession NP_001829.1). Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CCR7.

[60915] Chromodomain helicase dna binding protein 4 (CHD4, Accession NP_001264.1) is another GAM8554 target gene,

herein designated TARGET GENE. CHD4 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CHD4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CHD4 BINDING SITE, designated SEQ ID:2554, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60916] Another function of GAM8554 is therefore inhibition of Chromodomain helicase dna binding protein 4 (CHD4, Accession NP_001264.1), a gene which may regulate gene expression and chromatin structure and therefore may be associated with Dermatomyositis. Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of Dermatomyositis, and of other diseases and clinical conditions associated with CHD4.

[60917] The function of CHD4 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM63.1. Carbohydrate (n-acetylglucosamine-6-o) sulfotransferase 2 (CHST2, Accession NP_004258.2) is another GAM8554 target gene, herein designated TARGET

GENE. CHST2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CHST2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CHST2 BINDING SITE, designated SEQ ID:5960, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60918] Another function of GAM8554 is therefore inhibition of Carbohydrate (n-acetylglucosamine-6-o) sulfotransferase 2 (CHST2, Accession NP_004258.2), a gene which may serve as a transmembrane domain for a type II protein or as a Golgi retention signal. Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CHST2.

[60919] The function of CHST2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM1191.1. Ciliary neurotrophic factor (CNTF, Accession NP_000605.1) is another GAM8554 target gene, herein designated TARGET GENE. CNTF BINDING SITE is a target binding site found in the 3' untranslated region of

mRNA encoded by CNTF, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CNTF BINDING SITE, designated SEQ ID:19190, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60920] Another function of GAM8554 is therefore inhibition of Ciliary neurotrophic factor (CNTF, Accession NP_000605.1), a gene which is a survival factor for various neuronal cell types. and therefore may be associated with Ciliary neurotrophic factor polymorphism. Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of Ciliary neurotrophic factor polymorphism, and of other diseases and clinical conditions associated with CNTF.

[60921] The function of CNTF and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM148.1.Carnitine acetyltransferase (CRAT, Accession NP_003994.2) is another GAM8554 target gene, herein designated TARGET GENE. CRAT BINDING SITE is a target binding site found in the 5' untranslated region of multi-

ple transcripts of mRNA encoded by CRAT, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CRAT BINDING SITE, designated SEQ ID:8044, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60922] Another function of GAM8554 is therefore inhibition of Carnitine acetyltransferase (CRAT, Accession NP_003994.2), a gene which catalyzes the reversible transfer of acyl groups from an acyl- CoA thioester to carnitine. and therefore may be associated with Alzheimer's disease. Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of Alzheimer's disease, and of other diseases and clinical conditions associated with CRAT.

[60923] The function of CRAT and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM229.1.Corticotropin releasing hormone (CRH, Accession NP_000747.1) is another GAM8554 target gene, herein designated TARGET GENE. CRH BINDING SITE is a target binding site found in the 3' untranslated region of

mRNA encoded by CRH, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CRH BINDING SITE, designated SEQ ID:7497, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60924] Another function of GAM8554 is therefore inhibition of Corticotropin releasing hormone (CRH, Accession NP_000747.1), a gene which regulates the release of corticotropin from pituitary gland. and therefore may be associated with Alzheimer's disease. Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of Alzheimer's disease, and of other diseases and clinical conditions associated with CRH.

[60925] The function of CRH and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM371.1. Chemokine (c-x-c motif) ligand 9 (CXCL9, Accession NP_002407.1) is another GAM8554 target gene, herein designated TARGET GENE. CXCL9 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CXCL9, corresponding to a target bind-

ing site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CXCL9 BINDING SITE, designated SEQ ID:548, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60926] Another function of GAM8554 is therefore inhibition of Chemokine (c-x-c motif) ligand 9 (CXCL9, Accession NP_002407.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CXCL9.

[60927] Daz associated protein 2 (DAZAP2, Accession NP_055579.1) is another GAM8554 target gene, herein designated TARGET GENE. DAZAP2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DAZAP2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DAZAP2 BINDING SITE, designated SEQ ID:12754, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60928] Another function of GAM8554 is therefore inhibition of

Daz associated protein 2 (DAZAP2, Accession NP_055579.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DAZAP2.

[60929] DC2 (Accession NP_067050.1) is another GAM8554 target gene, herein designated TARGET GENE. DC2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DC2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DC2 BINDING SITE, designated SEQ ID:4382, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60930] Another function of GAM8554 is therefore inhibition of DC2 (Accession NP_067050.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DC2.

[60931] Desmin (DES, Accession NP_001918.2) is another GAM8554 target gene, herein designated TARGET GENE. DES BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DES, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DES BINDING SITE, designated SEQ ID:17929, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60932] Another function of GAM8554 is therefore inhibition of Desmin (DES, Accession NP_001918.2) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DES.

[60933] Deoxyguanosine kinase (DGUOK, Accession NP_550440.1) is another GAM8554 target gene, herein designated TARGET GENE. DGUOK BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by DGUOK, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DGUOK BINDING SITE, designated SEQ ID:2183, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60934] Another function of GAM8554 is therefore inhibition of Deoxyguanosine kinase (DGUOK, Accession

NP_550440.1), a gene which is deoxyguanosine kinase and mediates phosphorylation of several deoxyribonucleosides and therefore may be associated with Mitochondrial dna depletion syndromes . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of Mitochondrial dna depletion syndromes ., and of other diseases and clinical conditions associated with DGUOK.

[60935] The function of DGUOK and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM385.2. Deoxyguanosine kinase (DGUOK, Accession NP_550438.1) is another GAM8554 target gene, herein designated TARGET GENE. DGUOK BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by DGUOK, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DGUOK BINDING SITE, designated SEQ ID:2183, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60936] Another function of GAM8554 is therefore inhibition of Deoxyguanosine kinase (DGUOK, Accession

NP_550438.1), a gene which is deoxyguanosine kinase and mediates phosphorylation of several deoxyribonucleosides and therefore may be associated with Mitochondrial dna depletion syndromes . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of Mitochondrial dna depletion syndromes ., and of other diseases and clinical conditions associated with DGUOK.

[60937] The function of DGUOK and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM385.2.DHDDS (Accession NP_079163.1) is another GAM8554 target gene, herein designated TARGET GENE. DHDDS BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by DHDDS, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DHDDS BINDING SITE, designated SEQ ID:6851, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60938] Another function of GAM8554 is therefore inhibition of DHDDS (Accession NP_079163.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of

diseases and clinical conditions associated with DHDDS.

[60939] DHRS1 (Accession NP_612461.1) is another GAM8554 target gene, herein designated TARGET GENE. DHRS1 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by DHRS1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DHRS1 BINDING SITE, designated SEQ ID:10467, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60940] Another function of GAM8554 is therefore inhibition of DHRS1 (Accession NP_612461.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DHRS1.

[60941] DKFZP434F2021 (Accession NP_056227.1) is another GAM8554 target gene, herein designated TARGET GENE. DKFZP434F2021 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZP434F2021, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP434F2021 BINDING SITE,

designated SEQ ID:10822, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60942] Another function of GAM8554 is therefore inhibition of DKFZP434F2021 (Accession NP_056227.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZP434F2021.

[60943] DKFZP434H132 (Accession NP_056307.1) is another GAM8554 target gene, herein designated TARGET GENE. DKFZP434H132 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZP434H132, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP434H132 BINDING SITE, designated SEQ ID:12087, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60944] Another function of GAM8554 is therefore inhibition of DKFZP434H132 (Accession NP_056307.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated

with DKFZP434H132.

[60945] DKFZP434J046 (Accession NP_056486.1) is another GAM8554 target gene, herein designated TARGET GENE. DKFZP434J046 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by DKFZP434J046, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP434J046 BINDING SITE, designated SEQ ID:12435, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60946] Another function of GAM8554 is therefore inhibition of DKFZP434J046 (Accession NP_056486.1). Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZP434J046.

[60947] DKFZP564O0423 (Accession XP_166254.2) is another GAM8554 target gene, herein designated TARGET GENE. DKFZP564O0423 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZP564O0423, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III

of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP564O0423 BINDING SITE, designated SEQ ID:2580, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60948] Another function of GAM8554 is therefore inhibition of DKFZP564O0423 (Accession XP_166254.2) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZP564O0423.

[60949] DKFZP566K1924 (Accession NP_056278.1) is another GAM8554 target gene, herein designated TARGET GENE. DKFZP566K1924 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZP566K1924, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP566K1924 BINDING SITE, designated SEQ ID:2609, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60950] Another function of GAM8554 is therefore inhibition of DKFZP566K1924 (Accession NP_056278.1) . Accordingly,

utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZP566K1924.

[60951] DKFZP586I2223 (Accession NP_542768.1) is another GAM8554 target gene, herein designated TARGET GENE. DKFZP586I2223 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by DKFZP586I2223, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP586I2223 BINDING SITE, designated SEQ ID:8692, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60952] Another function of GAM8554 is therefore inhibition of DKFZP586I2223 (Accession NP_542768.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZP586I2223.

[60953] DKFZP586I2223 (Accession NP_542769.1) is another GAM8554 target gene, herein designated TARGET GENE. DKFZP586I2223 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts

of mRNA encoded by DKFZP586I2223, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP586I2223 BINDING SITE, designated SEQ ID:8692, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60954] Another function of GAM8554 is therefore inhibition of DKFZP586I2223 (Accession NP_542769.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZP586I2223.

[60955] DKFZP586I2223 (Accession NP_056253.2) is another GAM8554 target gene, herein designated TARGET GENE. DKFZP586I2223 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by DKFZP586I2223, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP586I2223 BINDING SITE, designated SEQ ID:8692, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60956] Another function of GAM8554 is therefore inhibition of DKFZP586I2223 (Accession NP_056253.2) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZP586I2223.

[60957] DKFZp761B107 (Accession NP_775734.1) is another GAM8554 target gene, herein designated TARGET GENE. DKFZp761B107 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZp761B107, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp761B107 BINDING SITE, designated SEQ ID:11144, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60958] Another function of GAM8554 is therefore inhibition of DKFZp761B107 (Accession NP_775734.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp761B107.

[60959] DKFZp761O2018 (Accession XP_044062.3) is another GAM8554 target gene, herein designated TARGET GENE.

DKFZp761O2018 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZp761O2018, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp761O2018 BINDING SITE, designated SEQ ID:14901, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60960] Another function of GAM8554 is therefore inhibition of DKFZp761O2018 (Accession XP_044062.3) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp761O2018.

[60961] DKFZP762N2316 (Accession NP_067047.2) is another GAM8554 target gene, herein designated TARGET GENE. DKFZP762N2316 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by DKFZP762N2316, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP762N2316 BINDING SITE, designated SEQ ID:19658, to

the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60962] Another function of GAM8554 is therefore inhibition of DKFZP762N2316 (Accession NP_067047.2) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZP762N2316.

[60963] Eukaryotic translation initiation factor 4 gamma, 1 (EIF4G1, Accession NP_004944.1) is another GAM8554 target gene, herein designated TARGET GENE. EIF4G1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by EIF4G1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of EIF4G1 BINDING SITE, designated SEQ ID:7541, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60964] Another function of GAM8554 is therefore inhibition of Eukaryotic translation initiation factor 4 gamma, 1 (EIF4G1, Accession NP_004944.1), a gene which is a Translation initiation factor. Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of

diseases and clinical conditions associated with EIF4G1.

[60965] The function of EIF4G1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM221.1. Ectonucleoside triphosphate diphosphohydrolase 6 (putative function) (ENTPD6, Accession NP_001238.1) is another GAM8554 target gene, herein designated TARGET GENE. ENTPD6 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by ENTPD6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ENTPD6 BINDING SITE, designated SEQ ID:12576, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60966] Another function of GAM8554 is therefore inhibition of Ectonucleoside triphosphate diphosphohydrolase 6 (putative function) (ENTPD6, Accession NP_001238.1), a gene which might support glycosylation reactions in the golgi apparatus and, when released from cells, might catalyze the hydrolysis of extracellular nucleotides. Accordingly, utilities of GAM8554 include diagnosis, prevention

and treatment of diseases and clinical conditions associated with ENTPD6.

[60967] The function of ENTPD6 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM65.2.ERK8 (Accession NP_620590.1) is another GAM8554 target gene, herein designated TARGET GENE. ERK8 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ERK8, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ERK8 BINDING SITE, designated SEQ ID:15517, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60968] Another function of GAM8554 is therefore inhibition of ERK8 (Accession NP_620590.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ERK8.

[60969] Ecotropic viral integration site 5 (EVI5, Accession NP_005656.2) is another GAM8554 target gene, herein designated TARGET GENE. EVI5 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA

encoded by EVI5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of EVI5 BINDING SITE, designated SEQ ID:5538, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60970] Another function of GAM8554 is therefore inhibition of Ecotropic viral integration site 5 (EVI5, Accession NP_005656.2) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with EVI5.

[60971] Family with sequence similarity 10, member a3 (FAM10A3, Accession XP_015334.4) is another GAM8554 target gene, herein designated TARGET GENE. FAM10A3 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by FAM10A3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FAM10A3 BINDING SITE, designated SEQ ID:874, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60972] Another function of GAM8554 is therefore inhibition of Family with sequence similarity 10, member a3 (FAM10A3, Accession XP_015334.4) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FAM10A3.

[60973] FBXO16 (Accession NP_758954.1) is another GAM8554 target gene, herein designated TARGET GENE. FBXO16 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FBXO16, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FBXO16 BINDING SITE, designated SEQ ID:9967, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60974] Another function of GAM8554 is therefore inhibition of FBXO16 (Accession NP_758954.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FBXO16.

[60975] FLJ00007 (Accession NP_258260.1) is another GAM8554 target gene, herein designated TARGET GENE. FLJ00007 BINDING SITE is a target binding site found in the 3' un-

translated region of mRNA encoded by FLJ00007, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ00007 BINDING SITE, designated SEQ ID:4850, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60976] Another function of GAM8554 is therefore inhibition of FLJ00007 (Accession NP_258260.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ00007.

[60977] FLJ11301 (Accession NP_060855.1) is another GAM8554 target gene, herein designated TARGET GENE. FLJ11301 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ11301, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ11301 BINDING SITE, designated SEQ ID:18187, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60978] Another function of GAM8554 is therefore inhibition of

FLJ11301 (Accession NP_060855.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ11301.

[60979] FLJ12895 (Accession NP_076415.2) is another GAM8554 target gene, herein designated TARGET GENE. FLJ12895 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FLJ12895, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ12895 BINDING SITE, designated SEQ ID:18925, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60980] Another function of GAM8554 is therefore inhibition of FLJ12895 (Accession NP_076415.2) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ12895.

[60981] FLJ12960 (Accession NP_078914.1) is another GAM8554 target gene, herein designated TARGET GENE. FLJ12960 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ12960, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ12960 BINDING SITE, designated SEQ ID:13088, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60982] Another function of GAM8554 is therefore inhibition of FLJ12960 (Accession NP_078914.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ12960.

[60983] FLJ20707 (Accession NP_060406.1) is another GAM8554 target gene, herein designated TARGET GENE. FLJ20707 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by FLJ20707, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20707 BINDING SITE, designated SEQ ID:16918, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60984] Another function of GAM8554 is therefore inhibition of

FLJ20707 (Accession NP_060406.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20707.

[60985] FLJ20898 (Accession NP_078876.1) is another GAM8554 target gene, herein designated TARGET GENE. FLJ20898 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FLJ20898, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20898 BINDING SITE, designated SEQ ID:12410, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60986] Another function of GAM8554 is therefore inhibition of FLJ20898 (Accession NP_078876.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20898.

[60987] FLJ22944 (Accession NP_079421.2) is another GAM8554 target gene, herein designated TARGET GENE. FLJ22944 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FLJ22944, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ22944 BINDING SITE, designated SEQ ID:10158, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60988] Another function of GAM8554 is therefore inhibition of FLJ22944 (Accession NP_079421.2) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ22944.

[60989] FLJ23867 (Accession NP_689875.1) is another GAM8554 target gene, herein designated TARGET GENE. FLJ23867 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ23867, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ23867 BINDING SITE, designated SEQ ID:13980, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60990] Another function of GAM8554 is therefore inhibition of FLJ23867 (Accession NP_689875.1) . Accordingly, utilities

of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ23867.

[60991] FLJ25756 (Accession NP_776175.1) is another GAM8554 target gene, herein designated TARGET GENE. FLJ25756 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FLJ25756, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ25756 BINDING SITE, designated SEQ ID:3815, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60992] Another function of GAM8554 is therefore inhibition of FLJ25756 (Accession NP_776175.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ25756.

[60993] FLJ30934 (Accession NP_689973.1) is another GAM8554 target gene, herein designated TARGET GENE. FLJ30934 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ30934, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ30934 BINDING SITE, designated SEQ ID:13660, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60994] Another function of GAM8554 is therefore inhibition of FLJ30934 (Accession NP_689973.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ30934.

[60995] FLJ31166 (Accession NP_694567.1) is another GAM8554 target gene, herein designated TARGET GENE. FLJ31166 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ31166, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ31166 BINDING SITE, designated SEQ ID:17040, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60996] Another function of GAM8554 is therefore inhibition of FLJ31166 (Accession NP_694567.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment

of diseases and clinical conditions associated with FLJ31166.

[60997] FLJ31318 (Accession NP_689499.1) is another GAM8554 target gene, herein designated TARGET GENE. FLJ31318 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ31318, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ31318 BINDING SITE, designated SEQ ID:10740, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[60998] Another function of GAM8554 is therefore inhibition of FLJ31318 (Accession NP_689499.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ31318.

[60999] FLJ32825 (Accession NP_689705.1) is another GAM8554 target gene, herein designated TARGET GENE. FLJ32825 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FLJ32825, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of FLJ32825 BINDING SITE, designated SEQ ID:11776, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61000] Another function of GAM8554 is therefore inhibition of FLJ32825 (Accession NP_689705.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ32825.

[61001] FLJ35936 (Accession NP_775735.1) is another GAM8554 target gene, herein designated TARGET GENE. FLJ35936 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ35936, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ35936 BINDING SITE, designated SEQ ID:1674, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61002] Another function of GAM8554 is therefore inhibition of FLJ35936 (Accession NP_775735.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

FLJ35936.

[61003] FLJ38499 (Accession NP_776158.1) is another GAM8554 target gene, herein designated TARGET GENE. FLJ38499 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ38499, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ38499 BINDING SITE, designated SEQ ID:16881, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61004] Another function of GAM8554 is therefore inhibition of FLJ38499 (Accession NP_776158.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ38499.

[61005] FLJ39106 (Accession NP_775900.1) is another GAM8554 target gene, herein designated TARGET GENE. FLJ39106 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ39106, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

FLJ39106 BINDING SITE, designated SEQ ID:8062, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61006] Another function of GAM8554 is therefore inhibition of FLJ39106 (Accession NP_775900.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ39106.

[61007] FLJ40852 (Accession NP_775948.1) is another GAM8554 target gene, herein designated TARGET GENE. FLJ40852 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ40852, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ40852 BINDING SITE, designated SEQ ID:1720, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61008] Another function of GAM8554 is therefore inhibition of FLJ40852 (Accession NP_775948.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ40852.

[61009] Forkhead box d4 (FOXD4, Accession XP_095746.6) is another GAM8554 target gene, herein designated TARGET GENE. FOXD4 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FOXD4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FOXD4 BINDING SITE, designated SEQ ID:10798, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61010] Another function of GAM8554 is therefore inhibition of Forkhead box d4 (FOXD4, Accession XP_095746.6). Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FOXD4.

[61011] FOXD4L1 (Accession NP_036316.1) is another GAM8554 target gene, herein designated TARGET GENE. FOXD4L1 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FOXD4L1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

FOXD4L1 BINDING SITE, designated SEQ ID:14436, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61012] Another function of GAM8554 is therefore inhibition of FOXD4L1 (Accession NP_036316.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FOXD4L1.

[61013] FUK (Accession NP_659496.1) is another GAM8554 target gene, herein designated TARGET GENE. FUK BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FUK, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FUK BINDING SITE, designated SEQ ID:16844, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61014] Another function of GAM8554 is therefore inhibition of FUK (Accession NP_659496.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FUK.

[61015] Fucosyltransferase 3 (galactoside

3(4)-l-fucosyltransferase, lewis blood group included) (FUT3, Accession NP_000140.1) is another GAM8554 target gene, herein designated TARGET GENE. FUT3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FUT3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FUT3 BINDING SITE, designated SEQ ID:2915, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61016] Another function of GAM8554 is therefore inhibition of Fucosyltransferase 3 (galactoside 3(4)-l-fucosyltransferase, lewis blood group included) (FUT3, Accession NP_000140.1), a gene which may catalyze alpha- 1,3 and alpha- 1,4 glycosidic linkages involved in the expression of vim- 2, lewis a, lewis b, sialyl lewis x and lewis x/ssea- 1 antigens. and therefore may be associated with Lewis- negative disease. Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of Lewis- negative disease., and of other diseases and clinical conditions associated with FUT3.

[61017] The function of FUT3 and its association with various dis-

eases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM180.1. Fucosyltransferase 5 (alpha (1,3) fucosyltransferase) (FUT5, Accession NP_002025.1) is another GAM8554 target gene, herein designated TARGET GENE. FUT5 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FUT5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FUT5 BINDING SITE, designated SEQ ID:2915, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61018] Another function of GAM8554 is therefore inhibition of Fucosyltransferase 5 (alpha (1,3) fucosyltransferase) (FUT5, Accession NP_002025.1), a gene which may catalyse alpha- 1,3 glycosidic linkages involved in the expression of vim- 2, lewis x/ssea- 1 and sialyl lewis x antigens. Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FUT5.

[61019] The function of FUT5 and its association with various diseases and clinical conditions, has been established by

previous studies, as described hereinabove with reference to GAM180.1. Fucosyltransferase 6 (alpha (1,3) fucosyltransferase) (FUT6, Accession NP_000141.1) is another GAM8554 target gene, herein designated TARGET GENE. FUT6 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FUT6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FUT6 BINDING SITE, designated SEQ ID:7499, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61020] Another function of GAM8554 is therefore inhibition of Fucosyltransferase 6 (alpha (1,3) fucosyltransferase) (FUT6, Accession NP_000141.1), a gene which is involved in the biosynthesis of the e-selectin ligand, sialyl-lewis x. catalyzes the transfer of fucose from gdp-beta-fucose to alpha-2,3 sialylated substrates. Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FUT6.

[61021] The function of FUT6 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM47.1.Fucosyltransferase 9 (alpha (1,3) fucosyltransferase) (FUT9, Accession NP_006572.1) is another GAM8554 target gene, herein designated TARGET GENE. FUT9 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FUT9, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FUT9 BINDING SITE, designated SEQ ID:16065, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61022] Another function of GAM8554 is therefore inhibition of Fucosyltransferase 9 (alpha (1,3) fucosyltransferase) (FUT9, Accession NP_006572.1), a gene which catalyzes alpha- 1,3 glycosidic linkages. Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FUT9.

[61023] The function of FUT9 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM31.1.Grb2-associated binding protein 2 (GAB2, Accession NP_036428.1) is another GAM8554 target gene, herein designated TARGET GENE. GAB2 BINDING SITE is a

target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by GAB2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GAB2 BINDING SITE, designated SEQ ID:7231, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61024] Another function of GAM8554 is therefore inhibition of Grb2-associated binding protein 2 (GAB2, Accession NP_036428.1), a gene which act as adapters for transmitting various signals. Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GAB2.

[61025] The function of GAB2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM63.1. Grb2-associated binding protein 2 (GAB2, Accession NP_536739.1) is another GAM8554 target gene, herein designated TARGET GENE. GAB2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by GAB2, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GAB2 BINDING SITE, designated SEQ ID:7231, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61026] Another function of GAM8554 is therefore inhibition of Grb2-associated binding protein 2 (GAB2, Accession NP_536739.1), a gene which act as adapters for transmitting various signals. Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GAB2.

[61027] The function of GAB2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM63.1. Growth arrest-specific 7 (GAS7, Accession NP_005881.1) is another GAM8554 target gene, herein designated TARGET GENE. GAS7 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by GAS7, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GAS7 BINDING SITE, designated SEQ ID:19750, to the nucleotide

sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61028] Another function of GAM8554 is therefore inhibition of Growth arrest-specific 7 (GAS7, Accession NP_005881.1), a gene which may play a role in promoting maturation and morphological differentiation of cerebellar neurons. and therefore may be associated with Leukemias with myeloid/lymphoid (mll). Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of Leukemias with myeloid/lymphoid (mll), and of other diseases and clinical conditions associated with GAS7.

[61029] The function of GAS7 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM72.1. Growth arrest-specific 7 (GAS7, Accession NP_003635.1) is another GAM8554 target gene, herein designated TARGET GENE. GAS7 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by GAS7, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GAS7 BINDING SITE, designated SEQ ID:19750, to the nucleotide

sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61030] Another function of GAM8554 is therefore inhibition of Growth arrest-specific 7 (GAS7, Accession NP_003635.1), a gene which may play a role in promoting maturation and morphological differentiation of cerebellar neurons. and therefore may be associated with Leukemias with myeloid/lymphoid (mll). Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of Leukemias with myeloid/lymphoid (mll), and of other diseases and clinical conditions associated with GAS7.

[61031] The function of GAS7 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM72.1. Golgi autoantigen, golgin subfamily a, 1 (GOLGA1, Accession NP_002068.1) is another GAM8554 target gene, herein designated TARGET GENE. GOLGA1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GOLGA1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GOLGA1 BINDING SITE, designated SEQ ID:5615, to the

nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61032] Another function of GAM8554 is therefore inhibition of Golgi autoantigen, golgin subfamily a, 1 (GOLGA1, Accession NP_002068.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GOLGA1.

[61033] Glutamate receptor, ionotropic, n-methyl d-aspartate 2b (GRIN2B, Accession NP_000825.1) is another GAM8554 target gene, herein designated TARGET GENE. GRIN2B BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GRIN2B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GRIN2B BINDING SITE, designated SEQ ID:10992, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61034] Another function of GAM8554 is therefore inhibition of Glutamate receptor, ionotropic, n-methyl d-aspartate 2b (GRIN2B, Accession NP_000825.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

GRIN2B.

[61035] G1 to s phase transition 2 (GSPT2, Accession NP_060564.1) is another GAM8554 target gene, herein designated TARGET GENE. GSPT2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GSPT2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GSPT2 BINDING SITE, designated SEQ ID:8094, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61036] Another function of GAM8554 is therefore inhibition of G1 to s phase transition 2 (GSPT2, Accession NP_060564.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GSPT2.

[61037] Hepatoma-derived growth factor (high-mobility group protein 1-like) (HDGF, Accession NP_004485.1) is another GAM8554 target gene, herein designated TARGET GENE. HDGF BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HDGF, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HDGF BINDING SITE, designated SEQ ID:2702, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61038] Another function of GAM8554 is therefore inhibition of Hepatoma-derived growth factor (high-mobility group protein 1-like) (HDGF, Accession NP_004485.1), a gene which is a heparin-binding protein, with mitogenic activity for fibroblasts. Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HDGF.

[61039] The function of HDGF and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM204.2.HELNF1 (Accession XP_033511.7) is another GAM8554 target gene, herein designated TARGET GENE. HELNF1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HELNF1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HELNF1 BINDING SITE, designated

SEQ ID:18562, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61040] Another function of GAM8554 is therefore inhibition of HELSNF1 (Accession XP_033511.7) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HEL-SNF1.

[61041] HEMK (Accession NP_057257.1) is another GAM8554 target gene, herein designated TARGET GENE. HEMK BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HEMK, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HEMK BINDING SITE, designated SEQ ID:15386, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61042] Another function of GAM8554 is therefore inhibition of HEMK (Accession NP_057257.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HEMK.

[61043] High mobility group at-hook 1 (HMGA1, Accession

NP_665909.1) is another GAM8554 target gene, herein designated TARGET GENE. HMGA1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by HMGA1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HMGA1 BINDING SITE, designated SEQ ID:13844, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61044] Another function of GAM8554 is therefore inhibition of High mobility group at-hook 1 (HMGA1, Accession NP_665909.1), a gene which orchestrates the assembly of a virus-induced enhanceosome by mediating a network of protein-DNA and protein-protein interactions. Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HMGA1.

[61045] The function of HMGA1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM139.1. High mobility group at-hook 1 (HMGA1, Accession NP_002122.1) is another GAM8554 target gene,

herein designated TARGET GENE. HMGA1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by HMGA1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HMGA1 BINDING SITE, designated SEQ ID:13844, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61046] Another function of GAM8554 is therefore inhibition of High mobility group at-hook 1 (HMGA1, Accession NP_002122.1), a gene which orchestrates the assembly of a virus-induced enhanceosome by mediating a network of protein-DNA and protein-protein interactions. Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HMGA1.

[61047] The function of HMGA1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM139.1. High mobility group at-hook 1 (HMGA1, Accession NP_665912.1) is another GAM8554 target gene, herein designated TARGET GENE. HMGA1 BINDING SITE is

a target binding site found in the 3` untranslated region of multiple transcripts of mRNA encoded by HMGA1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HMGA1 BINDING SITE, designated SEQ ID:13844, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61048] Another function of GAM8554 is therefore inhibition of High mobility group at-hook 1 (HMGA1, Accession NP_665912.1), a gene which orchestrates the assembly of a virus- induced enhanceosome by mediating a network of protein- DNA and protein- protein interactions . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HMGA1.

[61049] The function of HMGA1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM139.1.High mobility group at-hook 1 (HMGA1, Accession NP_665906.1) is another GAM8554 target gene, herein designated TARGET GENE. HMGA1 BINDING SITE is a target binding site found in the 3` untranslated region

of multiple transcripts of mRNA encoded by HMGA1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HMGA1 BINDING SITE, designated SEQ ID:13844, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61050] Another function of GAM8554 is therefore inhibition of High mobility group at-hook 1 (HMGA1, Accession NP_665906.1), a gene which orchestrates the assembly of a virus- induced enhanceosome by mediating a network of protein- DNA and protein- protein interactions . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HMGA1.

[61051] The function of HMGA1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM139.1.High mobility group at-hook 1 (HMGA1, Accession NP_665911.1) is another GAM8554 target gene, herein designated TARGET GENE. HMGA1 BINDING SITE is a target binding site found in the 3` untranslated region of multiple transcripts of mRNA encoded by HMGA1, cor-

responding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HMGA1 BINDING SITE, designated SEQ ID:13844, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61052] Another function of GAM8554 is therefore inhibition of High mobility group at-hook 1 (HMGA1, Accession NP_665911.1), a gene which orchestrates the assembly of a virus-induced enhanceosome by mediating a network of protein-DNA and protein-protein interactions. Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HMGA1.

[61053] The function of HMGA1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM139.1. High mobility group at-hook 1 (HMGA1, Accession NP_665910.1) is another GAM8554 target gene, herein designated TARGET GENE. HMGA1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by HMGA1, corresponding to a target binding site such as BINDING SITE

I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HMGA1 BINDING SITE, designated SEQ ID:13844, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61054] Another function of GAM8554 is therefore inhibition of High mobility group at-hook 1 (HMGA1, Accession NP_665910.1), a gene which orchestrates the assembly of a virus- induced enhanceosome by mediating a network of protein- DNA and protein- protein interactions . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HMGA1.

[61055] The function of HMGA1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM139.1.High mobility group at-hook 1 (HMGA1, Accession NP_665907.1) is another GAM8554 target gene, herein designated TARGET GENE. HMGA1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by HMGA1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 il-

illustrates the complementarity of the nucleotide sequences of HMGA1 BINDING SITE, designated SEQ ID:13844, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61056] Another function of GAM8554 is therefore inhibition of High mobility group at-hook 1 (HMGA1, Accession NP_665907.1), a gene which orchestrates the assembly of a virus- induced enhanceosome by mediating a network of protein- DNA and protein- protein interactions . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HMGA1.

[61057] The function of HMGA1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM139.1. High mobility group at-hook 1 (HMGA1, Accession NP_665908.1) is another GAM8554 target gene, herein designated TARGET GENE. HMGA1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by HMGA1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences

of HMGA1 BINDING SITE, designated SEQ ID:13844, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61058] Another function of GAM8554 is therefore inhibition of High mobility group at-hook 1 (HMGA1, Accession NP_665908.1), a gene which orchestrates the assembly of a virus- induced enhanceosome by mediating a network of protein- DNA and protein- protein interactions . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HMGA1.

[61059] The function of HMGA1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM139.1.Hermansky-pudlak syndrome 1 (HPS1, Accession NP_000186.1) is another GAM8554 target gene, herein designated TARGET GENE. HPS1 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by HPS1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HPS1 BINDING SITE, designated SEQ ID:8078, to the nucleotide sequence of

GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61060] Another function of GAM8554 is therefore inhibition of Hermansky-pudlak syndrome 1 (HPS1, Accession NP_000186.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HPS1.

[61061] HRIHFB2122 (Accession NP_008963.2) is another GAM8554 target gene, herein designated TARGET GENE. HRIHFB2122 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by HRIHFB2122, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HRIHFB2122 BINDING SITE, designated SEQ ID:3658, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61062] Another function of GAM8554 is therefore inhibition of HRIHFB2122 (Accession NP_008963.2) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HRIHFB2122.

[61063] Heparan sulfate (glucosamine) 3-o-sulfotransferase 2 (HS3ST2, Accession NP_006034.1) is another GAM8554 target gene, herein designated TARGET GENE. HS3ST2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HS3ST2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HS3ST2 BINDING SITE, designated SEQ ID:3906, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61064] Another function of GAM8554 is therefore inhibition of Heparan sulfate (glucosamine) 3-o-sulfotransferase 2 (HS3ST2, Accession NP_006034.1), a gene which plays a role in the generation of heparan sulfate proteoglycan. Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HS3ST2.

[61065] The function of HS3ST2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM767.1. Heparan sulfate 6-o-sulfotransferase 2 (HS6ST2, Accession NP_671704.2) is another GAM8554

target gene, herein designated TARGET GENE. HS6ST2 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by HS6ST2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HS6ST2 BINDING SITE, designated SEQ ID:13150, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61066] Another function of GAM8554 is therefore inhibition of Heparan sulfate 6-o-sulfotransferase 2 (HS6ST2, Accession NP_671704.2) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HS6ST2.

[61067] Inducible t-cell co-stimulator (ICOS, Accession NP_036224.1) is another GAM8554 target gene, herein designated TARGET GENE. ICOS BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ICOS, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ICOS BINDING SITE, designated

SEQ ID:16504, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61068] Another function of GAM8554 is therefore inhibition of Inducible t-cell co-stimulator (ICOS, Accession NP_036224.1), a gene which forms homodimers and functions as an inducible T- cell co- stimulator. Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ICOS.

[61069] The function of ICOS and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM369.2. Interleukin 18 receptor 1 (IL18R1, Accession NP_003846.1) is another GAM8554 target gene, herein designated TARGET GENE. IL18R1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by IL18R1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of IL18R1 BINDING SITE, designated SEQ ID:950, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61070] Another function of GAM8554 is therefore inhibition of Interleukin 18 receptor 1 (IL18R1, Accession NP_003846.1), a gene which is required for dorsal- ventral embryonic polarity and promotes heterophilic cellular adhesion. Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with IL18R1.

[61071] The function of IL18R1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM190.1. Integrin beta 3 binding protein (beta3-endonexin) (ITGB3BP, Accession NP_055103.3) is another GAM8554 target gene, herein designated TARGET GENE. ITGB3BP BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ITGB3BP, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ITGB3BP BINDING SITE, designated SEQ ID:6219, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61072] Another function of GAM8554 is therefore inhibition of

Integrin beta 3 binding protein (beta3–endonexin) (ITGB3BP, Accession NP_055103.3), a gene which interacts with the cytoplasmic tail of the integrin beta– 3 subunit. Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ITGB3BP.

[61073] The function of ITGB3BP and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM1701.2. Jun d proto–oncogene (JUND, Accession NP_005345.2) is another GAM8554 target gene, herein designated TARGET GENE. JUND BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by JUND, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of JUND BINDING SITE, designated SEQ ID:9711, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61074] Another function of GAM8554 is therefore inhibition of Jun d proto–oncogene (JUND, Accession NP_005345.2), a gene which binds an ap– 1 site. Accordingly, utilities of

GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with JUND.

[61075] The function of JUND and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM104.1.KAB (Accession NP_055627.1) is another GAM8554 target gene, herein designated TARGET GENE. KAB BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KAB, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KAB BINDING SITE, designated SEQ ID:6558, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61076] Another function of GAM8554 is therefore inhibition of KAB (Accession NP_055627.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KAB.

[61077] KIAA0375 (Accession XP_048462.1) is another GAM8554 target gene, herein designated TARGET GENE. KIAA0375 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0375, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0375 BINDING SITE, designated SEQ ID:12790, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61078] Another function of GAM8554 is therefore inhibition of KIAA0375 (Accession XP_048462.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0375.

[61079] KIAA0599 (Accession XP_085127.6) is another GAM8554 target gene, herein designated TARGET GENE. KIAA0599 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by KIAA0599, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0599 BINDING SITE, designated SEQ ID:16996, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61080] Another function of GAM8554 is therefore inhibition of KIAA0599 (Accession XP_085127.6) . Accordingly, utilities

of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0599.

[61081] KIAA0953 (Accession XP_039733.2) is another GAM8554 target gene, herein designated TARGET GENE. KIAA0953 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0953, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0953 BINDING SITE, designated SEQ ID:2253, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61082] Another function of GAM8554 is therefore inhibition of KIAA0953 (Accession XP_039733.2) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0953.

[61083] KIAA0984 (Accession XP_037557.2) is another GAM8554 target gene, herein designated TARGET GENE. KIAA0984 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by KIAA0984, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0984 BINDING SITE, designated SEQ ID:4106, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61084] Another function of GAM8554 is therefore inhibition of KIAA0984 (Accession XP_037557.2) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0984.

[61085] KIAA1045 (Accession XP_048592.1) is another GAM8554 target gene, herein designated TARGET GENE. KIAA1045 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1045, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1045 BINDING SITE, designated SEQ ID:5832, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61086] Another function of GAM8554 is therefore inhibition of KIAA1045 (Accession XP_048592.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment

of diseases and clinical conditions associated with KIAA1045.

[61087] KIAA1394 (Accession XP_208522.1) is another GAM8554 target gene, herein designated TARGET GENE. KIAA1394 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1394, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1394 BINDING SITE, designated SEQ ID:3139, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61088] Another function of GAM8554 is therefore inhibition of KIAA1394 (Accession XP_208522.1). Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1394.

[61089] KIAA1713 (Accession XP_290811.1) is another GAM8554 target gene, herein designated TARGET GENE. KIAA1713 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by KIAA1713, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of KIAA1713 BINDING SITE, designated SEQ ID:10338, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61090] Another function of GAM8554 is therefore inhibition of KIAA1713 (Accession XP_290811.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1713.

[61091] KIAA1843 (Accession XP_030838.3) is another GAM8554 target gene, herein designated TARGET GENE. KIAA1843 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1843, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1843 BINDING SITE, designated SEQ ID:15579, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61092] Another function of GAM8554 is therefore inhibition of KIAA1843 (Accession XP_030838.3) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

KIAA1843.

[61093] KIAA1870 (Accession NP_116277.1) is another GAM8554 target gene, herein designated TARGET GENE. KIAA1870 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by KIAA1870, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1870 BINDING SITE, designated SEQ ID:11147, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61094] Another function of GAM8554 is therefore inhibition of KIAA1870 (Accession NP_116277.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1870.

[61095] KIAA1940 (Accession XP_086981.2) is another GAM8554 target gene, herein designated TARGET GENE. KIAA1940 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1940, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of KIAA1940 BINDING SITE, designated SEQ ID:16455, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61096] Another function of GAM8554 is therefore inhibition of KIAA1940 (Accession XP_086981.2) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1940.

[61097] Kinesin family member 13b (KIF13B, Accession NP_056069.1) is another GAM8554 target gene, herein designated TARGET GENE. KIF13B BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIF13B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIF13B BINDING SITE, designated SEQ ID:11786, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61098] Another function of GAM8554 is therefore inhibition of Kinesin family member 13b (KIF13B, Accession NP_056069.1) . Accordingly, utilities of GAM8554 include

diagnosis, prevention and treatment of diseases and clinical conditions associated with KIF13B.

[61099] Kinesin family member 3c (KIF3C, Accession NP_002245.2) is another GAM8554 target gene, herein designated TARGET GENE. KIF3C BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIF3C, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIF3C BINDING SITE, designated SEQ ID:16548, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61100] Another function of GAM8554 is therefore inhibition of Kinesin family member 3c (KIF3C, Accession NP_002245.2) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIF3C.

[61101] Kallikrein 3, (prostate specific antigen) (KLK3, Accession NP_665863.1) is another GAM8554 target gene, herein designated TARGET GENE. KLK3 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by KLK3, corresponding

to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KLK3 BINDING SITE, designated SEQ ID:14566, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61102] Another function of GAM8554 is therefore inhibition of Kallikrein 3, (prostate specific antigen) (KLK3, Accession NP_665863.1), a gene which functions in the liquefaction of seminal coagulum and therefore may be associated with Prostatic carcinoma. Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of Prostatic carcinoma, and of other diseases and clinical conditions associated with KLK3.

[61103] The function of KLK3 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM205.2. Kallikrein 3, (prostate specific antigen) (KLK3, Accession NP_001639.1) is another GAM8554 target gene, herein designated TARGET GENE. KLK3 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by KLK3, corresponding to a target binding site such as BINDING

SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KLK3 BINDING SITE, designated SEQ ID:14566, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61104] Another function of GAM8554 is therefore inhibition of Kallikrein 3, (prostate specific antigen) (KLK3, Accession NP_001639.1), a gene which functions in the liquefaction of seminal coagulum and therefore may be associated with Prostatic carcinoma. Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of Prostatic carcinoma, and of other diseases and clinical conditions associated with KLK3.

[61105] The function of KLK3 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM205.2.L(3)mbt-like 2 (drosophila) (L3MBTL2, Accession NP_113676.2) is another GAM8554 target gene, herein designated TARGET GENE. L3MBTL2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by L3MBTL2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the com-

plementarity of the nucleotide sequences of L3MBTL2 BINDING SITE, designated SEQ ID:796, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61106] Another function of GAM8554 is therefore inhibition of L(3)mbt-like 2 (drosophila) (L3MBTL2, Accession NP_113676.2) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with L3MBTL2.

[61107] Laminin, gamma 2 (LAMC2, Accession NP_005553.1) is another GAM8554 target gene, herein designated TARGET GENE. LAMC2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by LAMC2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LAMC2 BINDING SITE, designated SEQ ID:13196, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61108] Another function of GAM8554 is therefore inhibition of Laminin, gamma 2 (LAMC2, Accession NP_005553.1) . Accordingly, utilities of GAM8554 include diagnosis, preven-

tion and treatment of diseases and clinical conditions associated with LAMC2.

[61109] Lymphocyte cytosolic protein 2 (sh2 domain containing leukocyte protein of 76kda) (LCP2, Accession NP_005556.1) is another GAM8554 target gene, herein designated TARGET GENE. LCP2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LCP2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LCP2 BINDING SITE, designated SEQ ID:7204, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61110] Another function of GAM8554 is therefore inhibition of Lymphocyte cytosolic protein 2 (sh2 domain containing leukocyte protein of 76kda) (LCP2, Accession NP_005556.1), a gene which involved in t cell antigen receptor mediated signaling. and therefore may be associated with Fetal hemorrhage and platelet dysfunction. Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of Fetal hemorrhage and platelet dysfunction, and of other diseases and clinical conditions as-

sociated with LCP2.

[61111] The function of LCP2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM175.1. Lim domains containing 1 (LIMD1, Accession NP_055055.1) is another GAM8554 target gene, herein designated TARGET GENE. LIMD1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LIMD1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LIMD1 BINDING SITE, designated SEQ ID:8280, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61112] Another function of GAM8554 is therefore inhibition of Lim domains containing 1 (LIMD1, Accession NP_055055.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LIMD1.

[61113] LOC116123 (Accession NP_620139.1) is another GAM8554 target gene, herein designated TARGET GENE. LOC116123 BINDING SITE is a target binding site found in

the 5' untranslated region of mRNA encoded by LOC116123, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC116123 BINDING SITE, designated SEQ ID:3173, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61114] Another function of GAM8554 is therefore inhibition of LOC116123 (Accession NP_620139.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC116123.

[61115] LOC121952 (Accession XP_062872.2) is another GAM8554 target gene, herein designated TARGET GENE. LOC121952 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC121952, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC121952 BINDING SITE, designated SEQ ID:15313, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also design-

nated SEQ ID:388.

[61116] Another function of GAM8554 is therefore inhibition of LOC121952 (Accession XP_062872.2) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC121952.

[61117] LOC130752 (Accession XP_059468.3) is another GAM8554 target gene, herein designated TARGET GENE. LOC130752 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC130752, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC130752 BINDING SITE, designated SEQ ID:10806, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61118] Another function of GAM8554 is therefore inhibition of LOC130752 (Accession XP_059468.3) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC130752.

[61119] LOC139547 (Accession XP_066756.4) is another

GAM8554 target gene, herein designated TARGET GENE. LOC139547 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC139547, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC139547 BINDING SITE, designated SEQ ID:6100, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61120] Another function of GAM8554 is therefore inhibition of LOC139547 (Accession XP_066756.4) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC139547.

[61121] LOC146909 (Accession XP_085634.2) is another GAM8554 target gene, herein designated TARGET GENE. LOC146909 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC146909, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC146909 BINDING SITE, design-

nated SEQ ID:14000, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61122] Another function of GAM8554 is therefore inhibition of LOC146909 (Accession XP_085634.2) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC146909.

[61123] LOC148710 (Accession XP_097506.1) is another GAM8554 target gene, herein designated TARGET GENE. LOC148710 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC148710, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC148710 BINDING SITE, designated SEQ ID:17195, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61124] Another function of GAM8554 is therefore inhibition of LOC148710 (Accession XP_097506.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC148710.

[61125] LOC149603 (Accession XP_047499.3) is another GAM8554 target gene, herein designated TARGET GENE. LOC149603 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC149603, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC149603 BINDING SITE, designated SEQ ID:7264, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61126] Another function of GAM8554 is therefore inhibition of LOC149603 (Accession XP_047499.3) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC149603.

[61127] LOC150819 (Accession XP_097954.1) is another GAM8554 target gene, herein designated TARGET GENE. LOC150819 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC150819, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC150819 BINDING SITE, designated SEQ ID:9583, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61128] Another function of GAM8554 is therefore inhibition of LOC150819 (Accession XP_097954.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC150819.

[61129] LOC152765 (Accession XP_087519.1) is another GAM8554 target gene, herein designated TARGET GENE. LOC152765 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC152765, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC152765 BINDING SITE, designated SEQ ID:4063, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61130] Another function of GAM8554 is therefore inhibition of LOC152765 (Accession XP_087519.1) . Accordingly, utili-

ties of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC152765.

[61131] LOC158298 (Accession XP_098916.1) is another GAM8554 target gene, herein designated TARGET GENE. LOC158298 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC158298, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC158298 BINDING SITE, designated SEQ ID:7028, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61132] Another function of GAM8554 is therefore inhibition of LOC158298 (Accession XP_098916.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC158298.

[61133] LOC203082 (Accession XP_114620.1) is another GAM8554 target gene, herein designated TARGET GENE. LOC203082 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by

LOC203082, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC203082 BINDING SITE, designated SEQ ID:4227, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61134] Another function of GAM8554 is therefore inhibition of LOC203082 (Accession XP_114620.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC203082.

[61135] LOC253499 (Accession XP_172902.2) is another GAM8554 target gene, herein designated TARGET GENE. LOC253499 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC253499, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC253499 BINDING SITE, designated SEQ ID:16092, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61136] Another function of GAM8554 is therefore inhibition of LOC253499 (Accession XP_172902.2) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC253499.

[61137] LOC253992 (Accession XP_172953.2) is another GAM8554 target gene, herein designated TARGET GENE. LOC253992 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC253992, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC253992 BINDING SITE, designated SEQ ID:3239, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61138] Another function of GAM8554 is therefore inhibition of LOC253992 (Accession XP_172953.2) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC253992.

[61139] LOC255849 (Accession XP_172855.1) is another GAM8554 target gene, herein designated TARGET GENE.

LOC255849 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC255849, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC255849 BINDING SITE, designated SEQ ID:9954, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61140] Another function of GAM8554 is therefore inhibition of LOC255849 (Accession XP_172855.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC255849.

[61141] LOC256861 (Accession XP_173004.1) is another GAM8554 target gene, herein designated TARGET GENE. LOC256861 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC256861, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC256861 BINDING SITE, designated SEQ ID:14030, to the nucleotide sequence of

GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61142] Another function of GAM8554 is therefore inhibition of LOC256861 (Accession XP_173004.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC256861.

[61143] LOC282915 (Accession XP_212579.1) is another GAM8554 target gene, herein designated TARGET GENE. LOC282915 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC282915, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC282915 BINDING SITE, designated SEQ ID:8045, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61144] Another function of GAM8554 is therefore inhibition of LOC282915 (Accession XP_212579.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC282915.

[61145] LOC282951 (Accession XP_212627.1) is another GAM8554 target gene, herein designated TARGET GENE. LOC282951 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC282951, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC282951 BINDING SITE, designated SEQ ID:8045, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61146] Another function of GAM8554 is therefore inhibition of LOC282951 (Accession XP_212627.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC282951.

[61147] LOC283028 (Accession XP_210862.1) is another GAM8554 target gene, herein designated TARGET GENE. LOC283028 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283028, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC283028 BINDING SITE, designated SEQ ID:19511, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61148] Another function of GAM8554 is therefore inhibition of LOC283028 (Accession XP_210862.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283028.

[61149] LOC283278 (Accession XP_210961.1) is another GAM8554 target gene, herein designated TARGET GENE. LOC283278 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283278, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283278 BINDING SITE, designated SEQ ID:18729, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61150] Another function of GAM8554 is therefore inhibition of LOC283278 (Accession XP_210961.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC283278.

[61151] LOC283314 (Accession XP_210969.1) is another GAM8554 target gene, herein designated TARGET GENE. LOC283314 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283314, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283314 BINDING SITE, designated SEQ ID:8601, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61152] Another function of GAM8554 is therefore inhibition of LOC283314 (Accession XP_210969.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283314.

[61153] LOC283690 (Accession XP_211167.1) is another GAM8554 target gene, herein designated TARGET GENE. LOC283690 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283690, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283690 BINDING SITE, designated SEQ ID:11309, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61154] Another function of GAM8554 is therefore inhibition of LOC283690 (Accession XP_211167.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283690.

[61155] LOC283849 (Accession NP_848611.1) is another GAM8554 target gene, herein designated TARGET GENE. LOC283849 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by LOC283849, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283849 BINDING SITE, designated SEQ ID:2526, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61156] Another function of GAM8554 is therefore inhibition of

LOC283849 (Accession NP_848611.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283849.

[61157] LOC283861 (Accession NP_787095.1) is another GAM8554 target gene, herein designated TARGET GENE. LOC283861 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283861, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283861 BINDING SITE, designated SEQ ID:13934, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61158] Another function of GAM8554 is therefore inhibition of LOC283861 (Accession NP_787095.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283861.

[61159] LOC283911 (Accession XP_211259.2) is another GAM8554 target gene, herein designated TARGET GENE. LOC283911 BINDING SITE is a target binding site found in

the 5' untranslated region of mRNA encoded by LOC283911, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283911 BINDING SITE, designated SEQ ID:17942, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61160] Another function of GAM8554 is therefore inhibition of LOC283911 (Accession XP_211259.2) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283911.

[61161] LOC284109 (Accession XP_211330.2) is another GAM8554 target gene, herein designated TARGET GENE. LOC284109 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC284109, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284109 BINDING SITE, designated SEQ ID:18036, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61162] Another function of GAM8554 is therefore inhibition of LOC284109 (Accession XP_211330.2) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284109.

[61163] LOC284999 (Accession XP_211728.1) is another GAM8554 target gene, herein designated TARGET GENE. LOC284999 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC284999, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC284999 BINDING SITE, designated SEQ ID:11242, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61164] Another function of GAM8554 is therefore inhibition of LOC284999 (Accession XP_211728.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284999.

[61165] LOC285281 (Accession XP_211829.1) is another GAM8554 target gene, herein designated TARGET GENE. LOC285281 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC285281, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285281 BINDING SITE, designated SEQ ID:8759, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61166] Another function of GAM8554 is therefore inhibition of LOC285281 (Accession XP_211829.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC285281.

[61167] LOC285456 (Accession XP_209617.1) is another GAM8554 target gene, herein designated TARGET GENE. LOC285456 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC285456, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285456 BINDING SITE, designated SEQ ID:683, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61168] Another function of GAM8554 is therefore inhibition of LOC285456 (Accession XP_209617.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285456.

[61169] LOC285602 (Accession XP_209676.1) is another GAM8554 target gene, herein designated TARGET GENE. LOC285602 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC285602, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285602 BINDING SITE, designated SEQ ID:7057, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61170] Another function of GAM8554 is therefore inhibition of LOC285602 (Accession XP_209676.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285602.

[61171] LOC285727 (Accession XP_212000.1) is another GAM8554 target gene, herein designated TARGET GENE. LOC285727 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285727, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285727 BINDING SITE, designated SEQ ID:16880, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61172] Another function of GAM8554 is therefore inhibition of

LOC285727 (Accession XP_212000.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285727.

[61173] LOC285733 (Accession XP_212006.1) is another GAM8554 target gene, herein designated TARGET GENE. LOC285733 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285733, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285733 BINDING SITE, designated SEQ ID:18454, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61174] Another function of GAM8554 is therefore inhibition of LOC285733 (Accession XP_212006.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285733.

[61175] LOC285779 (Accession XP_212016.1) is another GAM8554 target gene, herein designated TARGET GENE. LOC285779 BINDING SITE is a target binding site found in

the 5' untranslated region of mRNA encoded by LOC285779, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285779 BINDING SITE, designated SEQ ID:10046, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61176] Another function of GAM8554 is therefore inhibition of LOC285779 (Accession XP_212016.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285779.

[61177] LOC285804 (Accession XP_212029.1) is another GAM8554 target gene, herein designated TARGET GENE. LOC285804 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC285804, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285804 BINDING SITE, designated SEQ ID:15481, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also design-

nated SEQ ID:388.

[61178] Another function of GAM8554 is therefore inhibition of LOC285804 (Accession XP_212029.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285804.

[61179] LOC285833 (Accession XP_209790.1) is another GAM8554 target gene, herein designated TARGET GENE. LOC285833 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285833, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285833 BINDING SITE, designated SEQ ID:8045, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61180] Another function of GAM8554 is therefore inhibition of LOC285833 (Accession XP_209790.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285833.

[61181] LOC285843 (Accession XP_212034.1) is another

GAM8554 target gene, herein designated TARGET GENE. LOC285843 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC285843, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285843 BINDING SITE, designated SEQ ID:2900, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61182] Another function of GAM8554 is therefore inhibition of LOC285843 (Accession XP_212034.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285843.

[61183] LOC285946 (Accession XP_212103.1) is another GAM8554 target gene, herein designated TARGET GENE. LOC285946 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285946, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285946 BINDING SITE, design-

nated SEQ ID:1695, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61184] Another function of GAM8554 is therefore inhibition of LOC285946 (Accession XP_212103.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285946.

[61185] LOC286040 (Accession XP_209870.2) is another GAM8554 target gene, herein designated TARGET GENE. LOC286040 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC286040, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286040 BINDING SITE, designated SEQ ID:11421, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61186] Another function of GAM8554 is therefore inhibition of LOC286040 (Accession XP_209870.2) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC286040.

[61187] LOC286258 (Accession XP_209972.1) is another GAM8554 target gene, herein designated TARGET GENE. LOC286258 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286258, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286258 BINDING SITE, designated SEQ ID:15299, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61188] Another function of GAM8554 is therefore inhibition of LOC286258 (Accession XP_209972.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286258.

[61189] LOC286374 (Accession XP_212293.1) is another GAM8554 target gene, herein designated TARGET GENE. LOC286374 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC286374, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286374 BINDING SITE, designated SEQ ID:10194, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61190] Another function of GAM8554 is therefore inhibition of LOC286374 (Accession XP_212293.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286374.

[61191] LOC286380 (Accession XP_208412.1) is another GAM8554 target gene, herein designated TARGET GENE. LOC286380 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC286380, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286380 BINDING SITE, designated SEQ ID:867, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61192] Another function of GAM8554 is therefore inhibition of LOC286380 (Accession XP_208412.1) . Accordingly, utili-

ties of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286380.

[61193] LOC338682 (Accession XP_290521.1) is another GAM8554 target gene, herein designated TARGET GENE. LOC338682 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC338682, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338682 BINDING SITE, designated SEQ ID:10670, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61194] Another function of GAM8554 is therefore inhibition of LOC338682 (Accession XP_290521.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC338682.

[61195] LOC339483 (Accession NP_848641.1) is another GAM8554 target gene, herein designated TARGET GENE. LOC339483 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of

mRNA encoded by LOC339483, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339483 BINDING SITE, designated SEQ ID:10107, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61196] Another function of GAM8554 is therefore inhibition of LOC339483 (Accession NP_848641.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339483.

[61197] LOC339883 (Accession XP_291056.2) is another GAM8554 target gene, herein designated TARGET GENE. LOC339883 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC339883, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339883 BINDING SITE, designated SEQ ID:9637, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61198] Another function of GAM8554 is therefore inhibition of LOC339883 (Accession XP_291056.2) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339883.

[61199] LOC340319 (Accession XP_295216.1) is another GAM8554 target gene, herein designated TARGET GENE. LOC340319 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC340319, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340319 BINDING SITE, designated SEQ ID:4660, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61200] Another function of GAM8554 is therefore inhibition of LOC340319 (Accession XP_295216.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340319.

[61201] LOC340390 (Accession XP_291269.1) is another GAM8554 target gene, herein designated TARGET GENE.

LOC340390 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC340390, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340390 BINDING SITE, designated SEQ ID:2836, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61202] Another function of GAM8554 is therefore inhibition of LOC340390 (Accession XP_291269.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340390.

[61203] LOC348428 (Accession XP_302753.1) is another GAM8554 target gene, herein designated TARGET GENE. LOC348428 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC348428, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348428 BINDING SITE, designated SEQ ID:2990, to the nucleotide sequence of

GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61204] Another function of GAM8554 is therefore inhibition of LOC348428 (Accession XP_302753.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348428.

[61205] LOC348797 (Accession XP_302888.1) is another GAM8554 target gene, herein designated TARGET GENE. LOC348797 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC348797, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348797 BINDING SITE, designated SEQ ID:1312, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61206] Another function of GAM8554 is therefore inhibition of LOC348797 (Accession XP_302888.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348797.

[61207] LOC349192 (Accession XP_300973.1) is another GAM8554 target gene, herein designated TARGET GENE. LOC349192 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC349192, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349192 BINDING SITE, designated SEQ ID:13730, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61208] Another function of GAM8554 is therefore inhibition of LOC349192 (Accession XP_300973.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349192.

[61209] LOC349308 (Accession XP_302590.1) is another GAM8554 target gene, herein designated TARGET GENE. LOC349308 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC349308, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC349308 BINDING SITE, designated SEQ ID:8798, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61210] Another function of GAM8554 is therefore inhibition of LOC349308 (Accession XP_302590.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349308.

[61211] LOC349318 (Accession XP_300480.1) is another GAM8554 target gene, herein designated TARGET GENE. LOC349318 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC349318, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349318 BINDING SITE, designated SEQ ID:867, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61212] Another function of GAM8554 is therefore inhibition of LOC349318 (Accession XP_300480.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC349318.

[61213] LOC349334 (Accession XP_300488.1) is another GAM8554 target gene, herein designated TARGET GENE. LOC349334 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC349334, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349334 BINDING SITE, designated SEQ ID:867, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61214] Another function of GAM8554 is therefore inhibition of LOC349334 (Accession XP_300488.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349334.

[61215] LOC349466 (Accession XP_303269.1) is another GAM8554 target gene, herein designated TARGET GENE. LOC349466 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC349466, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349466 BINDING SITE, designated SEQ ID:7281, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61216] Another function of GAM8554 is therefore inhibition of LOC349466 (Accession XP_303269.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349466.

[61217] LOC51161 (Accession NP_057294.1) is another GAM8554 target gene, herein designated TARGET GENE. LOC51161 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC51161, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC51161 BINDING SITE, designated SEQ ID:12236, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61218] Another function of GAM8554 is therefore inhibition of LOC51161 (Accession NP_057294.1) . Accordingly, utili-

ties of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC51161.

[61219] LOC90268 (Accession NP_612357.1) is another GAM8554 target gene, herein designated TARGET GENE. LOC90268 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC90268, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC90268 BINDING SITE, designated SEQ ID:12418, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61220] Another function of GAM8554 is therefore inhibition of LOC90268 (Accession NP_612357.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC90268.

[61221] LOC90499 (Accession XP_032170.1) is another GAM8554 target gene, herein designated TARGET GENE. LOC90499 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC90499, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC90499 BINDING SITE, designated SEQ ID:2928, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61222] Another function of GAM8554 is therefore inhibition of LOC90499 (Accession XP_032170.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC90499.

[61223] Lysyl oxidase-like 3 (LOXL3, Accession NP_115992.1) is another GAM8554 target gene, herein designated TARGET GENE. LOXL3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOXL3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOXL3 BINDING SITE, designated SEQ ID:11442, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61224] Another function of GAM8554 is therefore inhibition of Lysyl oxidase-like 3 (LOXL3, Accession NP_115992.1), a gene which is expressed in many tissues, the highest lev-

els seen in placenta, heart, ovary, testis, small intestine and spleen. Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOXL3.

[61225] The function of LOXL3 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM664.2.LPHN1 (Accession NP_055736.1) is another GAM8554 target gene, herein designated TARGET GENE. LPHN1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LPHN1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LPHN1 BINDING SITE, designated SEQ ID:7496, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61226] Another function of GAM8554 is therefore inhibition of LPHN1 (Accession NP_055736.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LPHN1.

[61227] LRRC8 (Accession XP_026998.2) is another GAM8554 target gene, herein designated TARGET GENE. LRRC8 BIND-

ING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LRRC8, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LRRC8 BINDING SITE, designated SEQ ID:14275, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61228] Another function of GAM8554 is therefore inhibition of LRRC8 (Accession XP_026998.2) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LRRC8.

[61229] LYK5 (Accession NP_699166.1) is another GAM8554 target gene, herein designated TARGET GENE. LYK5 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LYK5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LYK5 BINDING SITE, designated SEQ ID:15716, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61230] Another function of GAM8554 is therefore inhibition of

LYK5 (Accession NP_699166.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LYK5.

[61231] Mad, mothers against decapentaplegic homolog 9 (drosophila) (MADH9, Accession NP_005896.1) is another GAM8554 target gene, herein designated TARGET GENE. MADH9 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MADH9, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MADH9 BINDING SITE, designated SEQ ID:15488, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61232] Another function of GAM8554 is therefore inhibition of Mad, mothers against decapentaplegic homolog 9 (drosophila) (MADH9, Accession NP_005896.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MADH9.

[61233] Mitogen-activated protein kinase kinase 1 interacting protein 1 (MAP2K1IP1, Accession NP_068805.1) is another GAM8554 target gene, herein designated TARGET GENE.

MAP2K1IP1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MAP2K1IP1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MAP2K1IP1 BINDING SITE, designated SEQ ID:5192, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61234] Another function of GAM8554 is therefore inhibition of Mitogen-activated protein kinase kinase 1 interacting protein 1 (MAP2K1IP1, Accession NP_068805.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MAP2K1IP1.

[61235] Mitogen-activated protein kinase kinase kinase 8 (MAP3K8, Accession NP_005195.2) is another GAM8554 target gene, herein designated TARGET GENE. MAP3K8 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MAP3K8, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

MAP3K8 BINDING SITE, designated SEQ ID:13588, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61236] Another function of GAM8554 is therefore inhibition of Mitogen-activated protein kinase kinase kinase 8 (MAP3K8, Accession NP_005195.2), a gene which is able to activate nf- kappa- b 1 by stimulating proteasome-mediated p. Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MAP3K8.

[61237] The function of MAP3K8 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM55.1.Mcm3 minichromosome maintenance deficient 3 (*s. cerevisiae*) associated protein, antisense (MCM3APAS, Accession NP_060588.1) is another GAM8554 target gene, herein designated TARGET GENE. MCM3APAS BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MCM3APAS, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MCM3APAS BINDING SITE, desig-

nated SEQ ID:5637, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61238] Another function of GAM8554 is therefore inhibition of Mcm3 minichromosome maintenance deficient 3 (*S. cerevisiae*) associated protein, antisense (MCM3APAS, Accession NP_060588.1). Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MCM3APAS.

[61239] Microfibrillar-associated protein 3 (MFAP3, Accession NP_005918.1) is another GAM8554 target gene, herein designated TARGET GENE. MFAP3 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MFAP3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MFAP3 BINDING SITE, designated SEQ ID:18666, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61240] Another function of GAM8554 is therefore inhibition of Microfibrillar-associated protein 3 (MFAP3, Accession NP_005918.1). Accordingly, utilities of GAM8554 include

diagnosis, prevention and treatment of diseases and clinical conditions associated with MFAP3.

[61241] MGC29898 (Accession NP_659485.1) is another GAM8554 target gene, herein designated TARGET GENE. MGC29898 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC29898, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC29898 BINDING SITE, designated SEQ ID:817, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61242] Another function of GAM8554 is therefore inhibition of MGC29898 (Accession NP_659485.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC29898.

[61243] MGC3101 (Accession NP_076948.1) is another GAM8554 target gene, herein designated TARGET GENE. MGC3101 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC3101, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of MGC3101 BINDING SITE, designated SEQ ID:10658, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61244] Another function of GAM8554 is therefore inhibition of MGC3101 (Accession NP_076948.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC3101.

[61245] MGC3234 (Accession NP_076436.2) is another GAM8554 target gene, herein designated TARGET GENE. MGC3234 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC3234, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC3234 BINDING SITE, designated SEQ ID:4854, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61246] Another function of GAM8554 is therefore inhibition of MGC3234 (Accession NP_076436.2) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

MGC3234.

[61247] MGC35048 (Accession NP_694940.1) is another GAM8554 target gene, herein designated TARGET GENE. MGC35048 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MGC35048, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC35048 BINDING SITE, designated SEQ ID:13468, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61248] Another function of GAM8554 is therefore inhibition of MGC35048 (Accession NP_694940.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC35048.

[61249] MGC7036 (Accession NP_659495.1) is another GAM8554 target gene, herein designated TARGET GENE. MGC7036 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC7036, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

MGC7036 BINDING SITE, designated SEQ ID:14389, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61250] Another function of GAM8554 is therefore inhibition of MGC7036 (Accession NP_659495.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC7036.

[61251] Membrane metallo–endopeptidase (neutral endopeptidase, enkephalinase, calla, cd10) (MME, Accession NP_009218.1) is another GAM8554 target gene, herein designated TARGET GENE. MME BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by MME, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MME BINDING SITE, designated SEQ ID:10848, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61252] Another function of GAM8554 is therefore inhibition of Membrane metallo–endopeptidase (neutral endopeptidase, enkephalinase, calla, cd10) (MME, Accession

NP_009218.1), a gene which is thermolysin- like specificity. and therefore is associated with Acute lymphocytic leukemia. Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of Acute lymphocytic leukemia, and of other diseases and clinical conditions associated with MME.

[61253] The function of MME and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM63.1. Membrane metallo- endopeptidase (neutral endopeptidase, enkephalinase, calla, cd10) (MME, Accession NP_009220.1) is another GAM8554 target gene, herein designated TARGET GENE. MME BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by MME, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MME BINDING SITE, designated SEQ ID:10848, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61254] Another function of GAM8554 is therefore inhibition of Membrane metallo- endopeptidase (neutral endopepti-

dase, enkephalinase, calla, cd10) (MME, Accession NP_009220.1), a gene which is thermolysin- like specificity. and therefore is associated with Acute lymphocytic leukemia. Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of Acute lymphocytic leukemia, and of other diseases and clinical conditions associated with MME.

[61255] The function of MME and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM63.1. Membrane metallo- endopeptidase (neutral endopeptidase, enkephalinase, calla, cd10) (MME, Accession NP_000893.1) is another GAM8554 target gene, herein designated TARGET GENE. MME BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by MME, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MME BINDING SITE, designated SEQ ID:10848, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61256] Another function of GAM8554 is therefore inhibition of

Membrane metallo–endopeptidase (neutral endopeptidase, enkephalinase, calla, cd10) (MME, Accession NP_000893.1), a gene which is thermolysin– like specificity. and therefore is associated with Acute lymphocytic leukemia. Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of Acute lymphocytic leukemia, and of other diseases and clinical conditions associated with MME.

[61257] The function of MME and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM63.1. Membrane metallo–endopeptidase (neutral endopeptidase, enkephalinase, calla, cd10) (MME, Accession NP_009219.1) is another GAM8554 target gene, herein designated TARGET GENE. MME BINDING SITE is a target binding site found in the 3` untranslated region of multiple transcripts of mRNA encoded by MME, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MME BINDING SITE, designated SEQ ID:10848, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61258] Another function of GAM8554 is therefore inhibition of Membrane metallo–endopeptidase (neutral endopeptidase, enkephalinase, calla, cd10) (MME, Accession NP_009219.1), a gene which is thermolysin– like specificity. and therefore is associated with Acute lymphocytic leukemia. Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of Acute lymphocytic leukemia, and of other diseases and clinical conditions associated with MME.

[61259] The function of MME and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM63.1.Msh homeo box homolog 2 (drosophila) (MSX2, Accession NP_002440.2) is another GAM8554 target gene, herein designated TARGET GENE. MSX2 BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by MSX2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MSX2 BINDING SITE, designated SEQ ID:14467, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61260] Another function of GAM8554 is therefore inhibition of Msh homeo box homolog 2 (drosophila) (MSX2, Accession NP_002440.2) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MSX2.

[61261] C-myc binding protein (MYCBP, Accession NP_036465.1) is another GAM8554 target gene, herein designated TARGET GENE. MYCBP BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MYCBP, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MYCBP BINDING SITE, designated SEQ ID:6531, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61262] Another function of GAM8554 is therefore inhibition of C-myc binding protein (MYCBP, Accession NP_036465.1), a gene which binds c- Myc stimulating the activation of E-box- dependent transcription. Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MYCBP.

[61263] The function of MYCBP and its association with various

diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM378.2. Neuroligin 4 (NLGN4, Accession NP_065793.1) is another GAM8554 target gene, herein designated TARGET GENE. NLGN4 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by NLGN4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NLGN4 BINDING SITE, designated SEQ ID:425, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61264] Another function of GAM8554 is therefore inhibition of Neuroligin 4 (NLGN4, Accession NP_065793.1). Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NLGN4.

[61265] Neuroligin 4 (NLGN4, Accession NP_851849.1) is another GAM8554 target gene, herein designated TARGET GENE. NLGN4 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by NLGN4, corresponding to a target binding site

such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NLGN4 BINDING SITE, designated SEQ ID:425, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61266] Another function of GAM8554 is therefore inhibition of Neuroligin 4 (NLGN4, Accession NP_851849.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NLGN4.

[61267] P5326 (Accession NP_113638.1) is another GAM8554 target gene, herein designated TARGET GENE. P5326 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by P5326, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of P5326 BINDING SITE, designated SEQ ID:7667, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61268] Another function of GAM8554 is therefore inhibition of P5326 (Accession NP_113638.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of

diseases and clinical conditions associated with P5326.

[61269] PACAP (Accession NP_057543.1) is another GAM8554 target gene, herein designated TARGET GENE. PACAP BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by PACAP, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PACAP BINDING SITE, designated SEQ ID:19792, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61270] Another function of GAM8554 is therefore inhibition of PACAP (Accession NP_057543.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PACAP.

[61271] Programmed cell death 2 (PDCD2, Accession NP_659005.1) is another GAM8554 target gene, herein designated TARGET GENE. PDCD2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PDCD2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

PDCD2 BINDING SITE, designated SEQ ID:11383, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61272] Another function of GAM8554 is therefore inhibition of Programmed cell death 2 (PDCD2, Accession NP_659005.1), a gene which may be a dna- binding protein with a regulatory function. Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PDCD2.

[61273] The function of PDCD2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM451.1.PEPP3 (Accession NP_055750.1) is another GAM8554 target gene, herein designated TARGET GENE. PEPP3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PEPP3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PEPP3 BINDING SITE, designated SEQ ID:1056, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61274] Another function of GAM8554 is therefore inhibition of

PEPP3 (Accession NP_055750.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PEPP3.

[61275] Phosphatidylserine decarboxylase (PISD, Accession NP_055153.1) is another GAM8554 target gene, herein designated TARGET GENE. PISD BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by PISD, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PISD BINDING SITE, designated SEQ ID:1719, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61276] Another function of GAM8554 is therefore inhibition of Phosphatidylserine decarboxylase (PISD, Accession NP_055153.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PISD.

[61277] PLPL (Accession NP_064566.1) is another GAM8554 target gene, herein designated TARGET GENE. PLPL BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by PLPL, corresponding to a target

binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PLPL BINDING SITE, designated SEQ ID:5391, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61278] Another function of GAM8554 is therefore inhibition of PLPL (Accession NP_064566.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PLPL.

[61279] Plexin b1 (PLXNB1, Accession NP_002664.1) is another GAM8554 target gene, herein designated TARGET GENE. PLXNB1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PLXNB1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PLXNB1 BINDING SITE, designated SEQ ID:15214, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61280] Another function of GAM8554 is therefore inhibition of Plexin b1 (PLXNB1, Accession NP_002664.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and

treatment of diseases and clinical conditions associated with PLXNB1.

[61281] Peroxisome proliferative activated receptor, delta (PPARD, Accession NP_006229.1) is another GAM8554 target gene, herein designated TARGET GENE. PPARD BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PPARD, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PPARD BINDING SITE, designated SEQ ID:5618, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61282] Another function of GAM8554 is therefore inhibition of Peroxisome proliferative activated receptor, delta (PPARD, Accession NP_006229.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PPARD.

[61283] Protein phosphatase 1, regulatory (inhibitor) subunit 12b (PPP1R12B, Accession NP_115288.1) is another GAM8554 target gene, herein designated TARGET GENE. PPP1R12B BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded

by PPP1R12B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PPP1R12B BINDING SITE, designated SEQ ID:18026, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61284] Another function of GAM8554 is therefore inhibition of Protein phosphatase 1, regulatory (inhibitor) subunit 12b (PPP1R12B, Accession NP_115288.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PPP1R12B.

[61285] Protein phosphatase 1, regulatory (inhibitor) subunit 12b (PPP1R12B, Accession NP_002472.1) is another GAM8554 target gene, herein designated TARGET GENE. PPP1R12B BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PPP1R12B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PPP1R12B BINDING SITE, designated SEQ ID:18026, to the nucleotide sequence of GAM8554

RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61286] Another function of GAM8554 is therefore inhibition of Protein phosphatase 1, regulatory (inhibitor) subunit 12b (PPP1R12B, Accession NP_002472.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PPP1R12B.

[61287] Protein kinase, camp-dependent, catalytic, beta (PRKACB, Accession NP_002722.1) is another GAM8554 target gene, herein designated TARGET GENE. PRKACB BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PRKACB, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PRKACB BINDING SITE, designated SEQ ID:19320, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61288] Another function of GAM8554 is therefore inhibition of Protein kinase, camp-dependent, catalytic, beta (PRKACB, Accession NP_002722.1), a gene which is the catalytic beta subunit of cAMP- dependent protein kinase (PKA).

Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PRKACB.

[61289] The function of PRKACB and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM133.2.ProSAPiP1 (Accession NP_055546.1) is another GAM8554 target gene, herein designated TARGET GENE. ProSAPiP1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ProSAPiP1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ProSAPiP1 BINDING SITE, designated SEQ ID:13653, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61290] Another function of GAM8554 is therefore inhibition of ProSAPiP1 (Accession NP_055546.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ProSAPiP1.

[61291] PRTD-NY3 (Accession NP_112186.2) is another GAM8554

target gene, herein designated TARGET GENE. PRTD-NY3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PRTD-NY3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PRTD-NY3 BINDING SITE, designated SEQ ID:13126, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61292] Another function of GAM8554 is therefore inhibition of PRTD-NY3 (Accession NP_112186.2) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PRTD-NY3.

[61293] Protein tyrosine phosphatase, receptor type, t (PTPRT, Accession NP_573400.1) is another GAM8554 target gene, herein designated TARGET GENE. PTPRT BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PTPRT, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PTPRT BINDING SITE, designated SEQ ID:17911, to the nu-

cleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61294] Another function of GAM8554 is therefore inhibition of Protein tyrosine phosphatase, receptor type, t (PTPRT, Accession NP_573400.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PTPRT.

[61295] Protein tyrosine phosphatase, receptor type, t (PTPRT, Accession NP_008981.2) is another GAM8554 target gene, herein designated TARGET GENE. PTPRT BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PTPRT, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PTPRT BINDING SITE, designated SEQ ID:17911, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61296] Another function of GAM8554 is therefore inhibition of Protein tyrosine phosphatase, receptor type, t (PTPRT, Accession NP_008981.2) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PTPRT.

[61297] RAB11-FIP4 (Accession NP_116321.2) is another GAM8554 target gene, herein designated TARGET GENE. RAB11-FIP4 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RAB11-FIP4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RAB11-FIP4 BINDING SITE, designated SEQ ID:5886, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61298] Another function of GAM8554 is therefore inhibition of RAB11-FIP4 (Accession NP_116321.2) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RAB11-FIP4.

[61299] Receptor (calcitonin) activity modifying protein 3 (RAMP3, Accession NP_005847.1) is another GAM8554 target gene, herein designated TARGET GENE. RAMP3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RAMP3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the comple-

mentarity of the nucleotide sequences of RAMP3 BINDING SITE, designated SEQ ID:19598, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61300] Another function of GAM8554 is therefore inhibition of Receptor (calcitonin) activity modifying protein 3 (RAMP3, Accession NP_005847.1), a gene which is required to transport calcitonin- receptor- like receptor (crlr) to the plasma membrane. Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RAMP3.

[61301] The function of RAMP3 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM625.1.Regulator of g-protein signalling 16 (RGS16, Accession NP_002919.1) is another GAM8554 target gene, herein designated TARGET GENE. RGS16 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RGS16, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RGS16 BINDING SITE, designated SEQ ID:14356, to the nucleotide sequence of

GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61302] Another function of GAM8554 is therefore inhibition of Regulator of G-protein signalling 16 (RGS16, Accession NP_002919.1), a gene which inhibits signal transduction. Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RGS16.

[61303] The function of RGS16 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM281.1.RIS (Accession NP_057647.1) is another GAM8554 target gene, herein designated TARGET GENE. RIS BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RIS, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RIS BINDING SITE, designated SEQ ID:4407, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61304] Another function of GAM8554 is therefore inhibition of RIS (Accession NP_057647.1) . Accordingly, utilities of

GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RIS.

[61305] Rna (guanine-7-) methyltransferase (RNMT, Accession NP_003790.1) is another GAM8554 target gene, herein designated TARGET GENE. RNMT BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RNMT, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RNMT BINDING SITE, designated SEQ ID:12208, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61306] Another function of GAM8554 is therefore inhibition of Rna (guanine-7-) methyltransferase (RNMT, Accession NP_003790.1), a gene which catalyzes the methylation of GpppN- at the guanine N7 position. Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RNMT.

[61307] The function of RNMT and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM133.2.Receptor tyrosine kinase-like orphan recep-

tor 2 (ROR2, Accession NP_004551.2) is another GAM8554 target gene, herein designated TARGET GENE. ROR2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ROR2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ROR2 BINDING SITE, designated SEQ ID:6454, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61308] Another function of GAM8554 is therefore inhibition of Receptor tyrosine kinase-like orphan receptor 2 (ROR2, Accession NP_004551.2), a gene which may be involved in the early formation of the chondrocytes. and therefore is associated with Robinow syndrome, autosomal recessive ;brachydactyly, type. Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of Robinow syndrome, autosomal recessive ;brachydactyly, type, and of other diseases and clinical conditions associated with ROR2.

[61309] The function of ROR2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM500.2.RP4-622L5 (Accession NP_061991.2) is another GAM8554 target gene, herein designated TARGET GENE. RP4-622L5 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RP4-622L5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RP4-622L5 BINDING SITE, designated SEQ ID:7263, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61310] Another function of GAM8554 is therefore inhibition of RP4-622L5 (Accession NP_061991.2) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RP4-622L5.

[61311] Retinoschisis (x-linked, juvenile) 1 (RS1, Accession NP_000321.1) is another GAM8554 target gene, herein designated TARGET GENE. RS1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RS1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the

nucleotide sequences of RS1 BINDING SITE, designated SEQ ID:17639, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

- [61312] Another function of GAM8554 is therefore inhibition of Retinoschisis (x-linked, juvenile) 1 (RS1, Accession NP_000321.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RS1.
- [61313] S164 (Accession XP_027330.5) is another GAM8554 target gene, herein designated TARGET GENE. S164 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by S164, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of S164 BINDING SITE, designated SEQ ID:15155, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.
- [61314] Another function of GAM8554 is therefore inhibition of S164 (Accession XP_027330.5) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with S164.

[61315] Squamous cell carcinoma antigen recognised by t cells 3 (SART3, Accession NP_055521.1) is another GAM8554 target gene, herein designated TARGET GENE. SART3 BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by SART3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SART3 BINDING SITE, designated SEQ ID:16857, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61316] Another function of GAM8554 is therefore inhibition of Squamous cell carcinoma antigen recognised by t cells 3 (SART3, Accession NP_055521.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SART3.

[61317] SBZF3 (Accession NP_065127.2) is another GAM8554 target gene, herein designated TARGET GENE. SBZF3 BINDING SITE is a target binding site found in the 3` untranslated region of multiple transcripts of mRNA encoded by SBZF3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide se-

quences of SBZF3 BINDING SITE, designated SEQ ID:420, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61318] Another function of GAM8554 is therefore inhibition of SBZF3 (Accession NP_065127.2) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SBZF3.

[61319] SBZF3 (Accession XP_300732.1) is another GAM8554 target gene, herein designated TARGET GENE. SBZF3 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by SBZF3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SBZF3 BINDING SITE, designated SEQ ID:420, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61320] Another function of GAM8554 is therefore inhibition of SBZF3 (Accession XP_300732.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SBZF3.

[61321] Sodium channel, voltage-gated, type iv, beta polypeptide (SCN4B, Accession NP_777594.1) is another GAM8554

target gene, herein designated TARGET GENE. SCN4B BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SCN4B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SCN4B BINDING SITE, designated SEQ ID:6820, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61322] Another function of GAM8554 is therefore inhibition of Sodium channel, voltage-gated, type iv, beta polypeptide (SCN4B, Accession NP_777594.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SCN4B.

[61323] Syndecan 3 (n-syndecan) (SDC3, Accession NP_055469.1) is another GAM8554 target gene, herein designated TARGET GENE. SDC3 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by SDC3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SDC3 BINDING SITE, designated SEQ ID:13246, to the nucleotide sequence of GAM8554 RNA,

herein designated GAM RNA, also designated SEQ ID:388.

[61324] Another function of GAM8554 is therefore inhibition of Syndecan 3 (n-syndecan) (SDC3, Accession NP_055469.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SDC3.

[61325] SFMBT (Accession NP_057413.1) is another GAM8554 target gene, herein designated TARGET GENE. SFMBT BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SFMBT, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SFMBT BINDING SITE, designated SEQ ID:18612, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61326] Another function of GAM8554 is therefore inhibition of SFMBT (Accession NP_057413.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SFMBT.

[61327] Sh3-domain grb2-like 2 (SH3GL2, Accession NP_003017.1) is another GAM8554 target gene, herein designated TARGET GENE. SH3GL2 BINDING SITE is a tar-

get binding site found in the 3' untranslated region of mRNA encoded by SH3GL2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SH3GL2 BINDING SITE, designated SEQ ID:1385, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61328] Another function of GAM8554 is therefore inhibition of Sh3-domain grb2-like 2 (SH3GL2, Accession NP_003017.1), a gene which plays a role in synaptic vesicle recycling, in particular in clathrin-mediated vesicle endocytosis. Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SH3GL2.

[61329] The function of SH3GL2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM513.1. Signal-induced proliferation-associated gene 1 (SIPA1, Accession NP_694985.28) is another GAM8554 target gene, herein designated TARGET GENE. SIPA1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA en-

coded by SIPA1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SIPA1 BINDING SITE, designated SEQ ID:4806, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61330] Another function of GAM8554 is therefore inhibition of Signal-induced proliferation-associated gene 1 (SIPA1, Accession NP_694985.28) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SIPA1.

[61331] Signal-induced proliferation-associated gene 1 (SIPA1, Accession NP_006738.2) is another GAM8554 target gene, herein designated TARGET GENE. SIPA1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by SIPA1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SIPA1 BINDING SITE, designated SEQ ID:4806, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61332] Another function of GAM8554 is therefore inhibition of Signal-induced proliferation-associated gene 1 (SIPA1, Accession NP_006738.2) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SIPA1.

[61333] Solute carrier family 20 (phosphate transporter), member 1 (SLC20A1, Accession NP_005406.3) is another GAM8554 target gene, herein designated TARGET GENE. SLC20A1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SLC20A1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC20A1 BINDING SITE, designated SEQ ID:17340, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61334] Another function of GAM8554 is therefore inhibition of Solute carrier family 20 (phosphate transporter), member 1 (SLC20A1, Accession NP_005406.3), a gene which could be a sodium- phosphate symporter. Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SLC20A1.

[61335] The function of SLC20A1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM391.1. Solute carrier family 25 (mitochondrial carrier; peroxisomal membrane protein, 34kda), member 17 (SLC25A17, Accession NP_006349.1) is another GAM8554 target gene, herein designated TARGET GENE. SLC25A17 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SLC25A17, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC25A17 BINDING SITE, designated SEQ ID:2699, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61336] Another function of GAM8554 is therefore inhibition of Solute carrier family 25 (mitochondrial carrier; peroxisomal membrane protein, 34kda), member 17 (SLC25A17, Accession NP_006349.1). Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SLC25A17.

[61337] Swi/snf related, matrix associated, actin dependent regu-

lator of chromatin, subfamily f, member 1 (SMARCF1, Accession NP_060920.4) is another GAM8554 target gene, herein designated TARGET GENE. SMARCF1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by SMARCF1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SMARCF1 BINDING SITE, designated SEQ ID:11978, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61338] Another function of GAM8554 is therefore inhibition of Swi/snf related, matrix associated, actin dependent regulator of chromatin, subfamily f, member 1 (SMARCF1, Accession NP_060920.4) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SMARCF1.

[61339] SPBPBP (Accession NP_006683.1) is another GAM8554 target gene, herein designated TARGET GENE. SPBPBP BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SPBPBP, corresponding to a target binding site such as BINDING SITE I, BINDING

SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SPBPBP BINDING SITE, designated SEQ ID:9243, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61340] Another function of GAM8554 is therefore inhibition of SPBPBP (Accession NP_006683.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SPBPBP.

[61341] Synaptojanin 2 (SYNJ2, Accession NP_003889.1) is another GAM8554 target gene, herein designated TARGET GENE. SYNJ2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SYNJ2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SYNJ2 BINDING SITE, designated SEQ ID:7330, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61342] Another function of GAM8554 is therefore inhibition of Synaptojanin 2 (SYNJ2, Accession NP_003889.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associ-

ated with SYNJ2.

[61343] Treacher collins-franceschetti syndrome 1 (TCOF1, Accession NP_000347.1) is another GAM8554 target gene, herein designated TARGET GENE. TCOF1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TCOF1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TCOF1 BINDING SITE, designated SEQ ID:1511, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61344] Another function of GAM8554 is therefore inhibition of Treacher collins-franceschetti syndrome 1 (TCOF1, Accession NP_000347.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TCOF1.

[61345] Transforming growth factor, beta 3 (TGFB3, Accession NP_003230.1) is another GAM8554 target gene, herein designated TARGET GENE. TGFB3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TGFB3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III

of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TGFB3 BINDING SITE, designated SEQ ID:3958, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61346] Another function of GAM8554 is therefore inhibition of Transforming growth factor, beta 3 (TGFB3, Accession NP_003230.1), a gene which is involved in embryogenesis and cell differentiation. Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TGFB3.

[61347] The function of TGFB3 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM483.1.TOLLIP (Accession NP_061882.2) is another GAM8554 target gene, herein designated TARGET GENE. TOLLIP BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TOLLIP, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TOLLIP BINDING SITE, designated SEQ ID:1045, to the nucleotide sequence of GAM8554 RNA, herein designated

GAM RNA, also designated SEQ ID:388.

[61348] Another function of GAM8554 is therefore inhibition of TOLLIP (Accession NP_061882.2) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TOLLIP.

[61349] TU3A (Accession NP_009108.1) is another GAM8554 target gene, herein designated TARGET GENE. TU3A BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TU3A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TU3A BINDING SITE, designated SEQ ID:17216, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61350] Another function of GAM8554 is therefore inhibition of TU3A (Accession NP_009108.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TU3A.

[61351] Udp-glucose dehydrogenase (UGDH, Accession NP_003350.1) is another GAM8554 target gene, herein designated TARGET GENE. UGDH BINDING SITE is a target binding site found in the 3' untranslated region of mRNA

encoded by UGDH, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of UGDH BINDING SITE, designated SEQ ID:18136, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61352] Another function of GAM8554 is therefore inhibition of Udp-glucose dehydrogenase (UGDH, Accession NP_003350.1), a gene which is an UDP- glucose dehydrogenase. Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with UGDH.

[61353] The function of UGDH and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM69.2.Unc-84 homolog a (c. elegans) (UNC84A, Accession XP_291219.1) is another GAM8554 target gene, herein designated TARGET GENE. UNC84A BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by UNC84A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the comple-

mentarity of the nucleotide sequences of UNC84A BINDING SITE, designated SEQ ID:4603, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61354] Another function of GAM8554 is therefore inhibition of Unc-84 homolog a (c. elegans) (UNC84A, Accession XP_291219.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with UNC84A.

[61355] URF2 (Accession NP_689519.2) is another GAM8554 target gene, herein designated TARGET GENE. URF2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by URF2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of URF2 BINDING SITE, designated SEQ ID:2555, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61356] Another function of GAM8554 is therefore inhibition of URF2 (Accession NP_689519.2) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with URF2.

[61357] VprBP (Accession NP_055518.1) is another GAM8554 target gene, herein designated TARGET GENE. VprBP BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by VprBP, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of VprBP BINDING SITE, designated SEQ ID:5213, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61358] Another function of GAM8554 is therefore inhibition of VprBP (Accession NP_055518.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with VprBP.

[61359] WDFY1 (Accession NP_065881.1) is another GAM8554 target gene, herein designated TARGET GENE. WDFY1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by WDFY1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of WDFY1 BINDING SITE, designated SEQ ID:18013, to the nucleotide sequence of GAM8554

RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61360] Another function of GAM8554 is therefore inhibition of WDFY1 (Accession NP_065881.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with WDFY1.

[61361] WDFY1 (Accession NP_848127.1) is another GAM8554 target gene, herein designated TARGET GENE. WDFY1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by WDFY1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of WDFY1 BINDING SITE, designated SEQ ID:18013, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61362] Another function of GAM8554 is therefore inhibition of WDFY1 (Accession NP_848127.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with WDFY1.

[61363] WFDC10B (Accession NP_742143.1) is another GAM8554 target gene, herein designated TARGET GENE. WFDC10B

BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by WFDC10B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of WFDC10B BINDING SITE, designated SEQ ID:7903, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61364] Another function of GAM8554 is therefore inhibition of WFDC10B (Accession NP_742143.1). Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with WFDC10B.

[61365] WFDC10B (Accession NP_742003.1) is another GAM8554 target gene, herein designated TARGET GENE. WFDC10B BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by WFDC10B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of WFDC10B BINDING SITE, designated SEQ ID:7903, to the nucleotide sequence of GAM8554

RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61366] Another function of GAM8554 is therefore inhibition of WFDC10B (Accession NP_742003.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with WFDC10B.

[61367] Wolf-hirschhorn syndrome candidate 1 (WHSC1, Accession NP_579889.1) is another GAM8554 target gene, herein designated TARGET GENE. WHSC1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by WHSC1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of WHSC1 BINDING SITE, designated SEQ ID:16764, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61368] Another function of GAM8554 is therefore inhibition of Wolf-hirschhorn syndrome candidate 1 (WHSC1, Accession NP_579889.1), a gene which binds covalently to and repairs g/t mismatches. and therefore may be associated with Wolf- hirschhorn syndrome. Accordingly, utilities of

GAM8554 include diagnosis, prevention and treatment of Wolf- hirschhorn syndrome, and of other diseases and clinical conditions associated with WHSC1.

[61369] The function of WHSC1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM30.1. Zinc finger protein 91 homolog (mouse) (ZFP91, Accession NP_739574.1) is another GAM8554 target gene, herein designated TARGET GENE. ZFP91 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by ZFP91, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZFP91 BINDING SITE, designated SEQ ID:19190, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61370] Another function of GAM8554 is therefore inhibition of Zinc finger protein 91 homolog (mouse) (ZFP91, Accession NP_739574.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZFP91.

[61371] Zinc finger protein 124 (hzf-16) (ZNF124, Accession NP_003422.1) is another GAM8554 target gene, herein designated TARGET GENE. ZNF124 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by ZNF124, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF124 BINDING SITE, designated SEQ ID:18483, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61372] Another function of GAM8554 is therefore inhibition of Zinc finger protein 124 (hzf-16) (ZNF124, Accession NP_003422.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF124.

[61373] Zinc finger protein 239 (ZNF239, Accession NP_005665.1) is another GAM8554 target gene, herein designated TARGET GENE. ZNF239 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by ZNF239, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of ZNF239 BINDING SITE, designated SEQ ID:13975, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61374] Another function of GAM8554 is therefore inhibition of Zinc finger protein 239 (ZNF239, Accession NP_005665.1) . Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF239.

[61375] Zinc finger protein 289, id1 regulated (ZNF289, Accession NP_115765.2) is another GAM8554 target gene, herein designated TARGET GENE. ZNF289 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZNF289, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF289 BINDING SITE, designated SEQ ID:14798, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61376] Another function of GAM8554 is therefore inhibition of Zinc finger protein 289, id1 regulated (ZNF289, Accession NP_115765.2) . Accordingly, utilities of GAM8554 include

diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF289.

[61377] Zinc finger protein 297 (ZNF297, Accession NP_005444.3) is another GAM8554 target gene, herein designated TARGET GENE. ZNF297 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZNF297, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF297 BINDING SITE, designated SEQ ID:17593, to the nucleotide sequence of GAM8554 RNA, herein designated GAM RNA, also designated SEQ ID:388.

[61378] Another function of GAM8554 is therefore inhibition of Zinc finger protein 297 (ZNF297, Accession NP_005444.3). Accordingly, utilities of GAM8554 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF297.

[61379]

[61380] Fig. 8 further provides a conceptual description of a novel bioinformatically detected of the present invention, referred to here as Genomic Address Messenger 8678 (GAM8678), which modulates expression of respective

target genes thereof, the function and utility of which target genes is known in the art.

[61381] GAM8678 is a novel bioinformatically detected regulatory, non protein coding, micro RNA (miRNA) gene. The method by which GAM8678 was detected is described hereinabove with reference to Figs. 8–15.

[61382] GAM8678 gene, herein designated GAM GENE, and GAM8678 target gene, herein designated TARGET GENE, are human genes contained in the human genome.

[61383] GAM8678 gene encodes a GAM8678 precursor RNA, herein designated GAM PRECURSOR RNA. Similar to other miRNA genes, and unlike most ordinary genes, GAM8678 precursor RNA does not encode a protein. A nucleotide sequence identical or highly similar to the nucleotide sequence of GAM8678 precursor RNA is designated SEQ ID:11, and is provided hereinbelow with reference to the sequence listing part.

[61384] GAM8678 precursor RNA folds onto itself, forming GAM8678 folded precursor RNA, herein designated GAM FOLDED PRECURSOR RNA, which has a two-dimensional `hairpin structure`. As is well known in the art, this `hairpin structure`, is typical of RNA encoded by miRNA genes, and is due to the fact that the nucleotide sequence

of the first half of the RNA encoded by a miRNA gene is an accurate or partial inversed-reversed sequence of the nucleotide sequence of the second half thereof.

[61385] GAM8678 precursor RNA folds onto itself, forming GAM8678 folded precursor RNA, herein designated GAM FOLDED PRECURSOR RNA, which has a two-dimensional `hairpin structure`. As is well known in the art, this `hairpin structure`, is typical of RNA encoded by miRNA genes, and is due to the fact that the nucleotide sequence of the first half of the RNA encoded by a miRNA gene is an accurate or partial reverse-complementary sequence of the nucleotide sequence of the second half thereof.

[61386] Nucleotide sequence of GAM8678 precursor RNA, designated SEQ-ID: 11, and a schematic representation of a predicted secondary folding of GAM8678 folded precursor RNA are further described with reference to Table 2, hereby incorporated by reference.

[61387] An enzyme complex designated DICER COMPLEX, `dices` the GAM8678 folded precursor RNA into GAM8678 RNA, herein designated GAM RNA, a single stranded ~22 nt long RNA segment. As is known in the art, `dicing` of a hairpin structured RNA precursor product into a short ~22nt RNA segment is catalyzed by an enzyme complex

comprising an enzyme called Dicer together with other necessary proteins. A probable (GAM Prediction Accuracy Group: C) nucleotide sequence of GAM8678 RNA is designated SEQ ID:347, and is provided hereinbelow with references to the sequence listing part and Table 3, hereby incorporated by reference.

[61388] GAM8678 target gene, herein designated TARGET GENE, encodes a corresponding messenger RNA, GAM8678 target RNA, herein designated GAM TARGET RNA. GAM8678 target RNA comprises three regions, as is typical of mRNA of a protein coding gene: a 5' untranslated region, a protein coding region and a 3' untranslated region, designated 5'UTR, PROTEIN CODING and 3'UTR respectively.

[61389] GAM8678 RNA, herein designated GAM RNA, binds complementarily to one or more target binding sites located in untranslated regions of GAM8678 target RNA, herein designated GAM TARGET RNA. This complementary binding is due to the fact that the nucleotide sequence of GAM8678 RNA is an accurate or a partial inversed-reversed sequence of the nucleotide sequence of each of the target binding sites. As an illustration, Fig. 8 shows three such target binding sites, designated BINDING SITE I, BINDING SITE II and BINDING SITE III respectively. It is appreciated

that the number of target binding sites shown in Fig. 8 is meant as an illustration only, and is not meant to be limiting. GAM8678 RNA may have a different number of target binding sites in untranslated regions of a GAM8678 target RNA. It is further appreciated that while Fig. 8 depicts target binding sites in the 3'UTR region, this is meant as an example only these target binding sites may be located in the 3'UTR region, the 5'UTR region, or in both 3'UTR and 5'UTR regions.

[61390] The complementary binding of GAM8678 RNA, herein designated GAM RNA, to target binding sites on GAM8678 target RNA, herein designated GAM TARGET RNA, such as BINDING SITE I, BINDING SITE II and BINDING SITE III, inhibits translation of GAM8678 target RNA into GAM8678 target protein, herein designated GAM TARGET PROTEIN. GAM target protein is therefore outlined by a broken line.

[61391] It is appreciated that GAM8678 target gene, herein designated TARGET GENE, in fact represents a plurality of GAM8678 target genes. The mRNA of each one of this plurality of GAM8678 target genes comprises one or more target binding sites, each having a nucleotide sequence which is at least partly complementary to GAM8678 RNA, herein designated GAM RNA, and which when bound by

GAM8678 RNA causes inhibition of translation of respective one or more GAM8678 target proteins.

[61392] It is further appreciated by one skilled in the art that the mode of translational inhibition illustrated by Fig. 8 with specific reference to translational inhibition exerted by GAM8678 gene, herein designated GAM GENE, on one or more GAM8678 target genes, herein collectively designated TARGET GENE, is common to other known miRNA genes. As mentioned hereinabove with reference to the background section, although a specific complementary binding site has been demonstrated only for some of the known miRNA genes (primarily Lin-4 and Let-7), all other recently discovered miRNA genes are also believed by those skilled in the art to modulate expression of other genes by complementary binding, although specific complementary binding sites of these other miRNA genes have not yet been found (Ruvkun G., Perspective: Glimpses of a tiny RNA world, Science 294,779 (2001)).

[61393] It is appreciated that specific functions and accordingly utilities of GAM8678 correlate with, and may be deduced from, the identity of the target genes which GAM8678 binds and inhibits, and the function of these target genes, as elaborated hereinbelow.

[61394]

[61395]

[61396] Atp-binding cassette, sub-family a (abc1), member 4 (ABCA4, Accession NP_000341.1) is a GAM8678 target gene, herein designated TARGET GENE. ABCA4 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ABCA4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ABCA4 BINDING SITE, designated SEQ ID:14902, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61397] A function of GAM8678 is therefore inhibition of Atp-binding cassette, sub-family a (abc1), member 4 (ABCA4, Accession NP_000341.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ABCA4.

[61398] Adenylate cyclase 1 (brain) (ADCY1, Accession NP_066939.1) is another GAM8678 target gene, herein designated TARGET GENE. ADCY1 BINDING SITE is a target binding site found in the 3' untranslated region of multi-

ple transcripts of mRNA encoded by ADCY1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ADCY1 BINDING SITE, designated SEQ ID:11743, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61399] Another function of GAM8678 is therefore inhibition of Adenylate cyclase 1 (brain) (ADCY1, Accession NP_066939.1), a gene which a calmodulin-sensitive adenylyl cyclase. it may play a role in memory acquisition and learning. Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ADCY1.

[61400] The function of ADCY1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM144.1. Alanine-glyoxylate aminotransferase (oxalosis i; hyperoxaluria i; glycolicaciduria; serine-pyruvate aminotransferase) (AGXT, Accession NP_000021.1) is another GAM8678 target gene, herein designated TARGET GENE. AGXT BINDING SITE is a target binding site found in the 3' untranslated region of mRNA

encoded by AGXT, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of AGXT BINDING SITE, designated SEQ ID:15028, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61401] Another function of GAM8678 is therefore inhibition of Alanine-glyoxylate aminotransferase (oxalosis i; hyperoxaluria i; glycolicaciduria; serine-pyruvate aminotransferase) (AGXT, Accession NP_000021.1), a gene which referred to the a enzyme is expressed only in the liver. and therefore is associated with Primary hyperoxaluria type i (ph1). Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of Primary hyperoxaluria type i (ph1), and of other diseases and clinical conditions associated with AGXT.

[61402] The function of AGXT and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM929.2.S-adenosylmethionine decarboxylase 1 (AMD1, Accession NP_001625.1) is another GAM8678 target gene, herein designated TARGET GENE. AMD1 BIND-

ING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by AMD1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of AMD1 BINDING SITE, designated SEQ ID:8863, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61403] Another function of GAM8678 is therefore inhibition of S-adenosylmethionine decarboxylase 1 (AMD1, Accession NP_001625.1), a gene which catalyzes the removal of the carboxylate group of S-adenosylmethionine in the polyamine biosynthesis pathway. Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with AMD1.

[61404] The function of AMD1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM100.1. ANKRD10 (Accession NP_060134.1) is another GAM8678 target gene, herein designated TARGET GENE. ANKRD10 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ANKRD10, corresponding to a target binding site such as

BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ANKRD10 BINDING SITE, designated SEQ ID:2626, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61405] Another function of GAM8678 is therefore inhibition of ANKRD10 (Accession NP_060134.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ANKRD10.

[61406] Ankyrin-like with transmembrane domains 1 (ANKTM1, Accession NP_015628.1) is another GAM8678 target gene, herein designated TARGET GENE. ANKTM1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ANKTM1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ANKTM1 BINDING SITE, designated SEQ ID:18718, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61407] Another function of GAM8678 is therefore inhibition of

Ankyrin-like with transmembrane domains 1 (ANKTM1, Accession NP_015628.1), a gene which attaches integral membrane proteins to cytoskeletal elements. Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ANKTM1.

[61408] The function of ANKTM1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM190.1.APOB48R (Accession NP_061160.1) is another GAM8678 target gene, herein designated TARGET GENE. APOB48R BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by APOB48R, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of APOB48R BINDING SITE, designated SEQ ID:14532, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61409] Another function of GAM8678 is therefore inhibition of APOB48R (Accession NP_061160.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment

of diseases and clinical conditions associated with APOB48R.

[61410] Atpase, cu++ transporting, alpha polypeptide (menkes syndrome) (ATP7A, Accession NP_000043.1) is another GAM8678 target gene, herein designated TARGET GENE. ATP7A BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ATP7A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ATP7A BINDING SITE, designated SEQ ID:14456, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61411] Another function of GAM8678 is therefore inhibition of Atpase, cu++ transporting, alpha polypeptide (menkes syndrome) (ATP7A, Accession NP_000043.1). Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ATP7A.

[61412] Bone morphogenetic protein 1 (BMP1, Accession NP_006122.1) is another GAM8678 target gene, herein designated TARGET GENE. BMP1 BINDING SITE is a target binding site found in the 3' untranslated region of multi-

ple transcripts of mRNA encoded by BMP1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BMP1 BINDING SITE, designated SEQ ID:18997, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61413] Another function of GAM8678 is therefore inhibition of Bone morphogenetic protein 1 (BMP1, Accession NP_006122.1), a gene which cleaves procollagens leading to formation of extracellular matrix. Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BMP1.

[61414] The function of BMP1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM51.1. Bone morphogenetic protein 1 (BMP1, Accession NP_006123.1) is another GAM8678 target gene, herein designated TARGET GENE. BMP1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by BMP1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of BMP1 BINDING SITE, designated SEQ ID:18997, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

- [61415] Another function of GAM8678 is therefore inhibition of Bone morphogenetic protein 1 (BMP1, Accession NP_006123.1), a gene which cleaves procollagens leading to formation of extracellular matrix. Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BMP1.
- [61416] The function of BMP1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM51.1. Breast cancer 1, early onset (BRCA1, Accession NP_009230.1) is another GAM8678 target gene, herein designated TARGET GENE. BRCA1 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by BRCA1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BRCA1 BINDING SITE, designated SEQ ID:16053, to the nucleotide sequence of GAM8678 RNA, herein designated

GAM RNA, also designated SEQ ID:347.

[61417] Another function of GAM8678 is therefore inhibition of Breast cancer 1, early onset (BRCA1, Accession NP_009230.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BRCA1.

[61418] Breast cancer 1, early onset (BRCA1, Accession NP_009225.1) is another GAM8678 target gene, herein designated TARGET GENE. BRCA1 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by BRCA1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BRCA1 BINDING SITE, designated SEQ ID:16053, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61419] Another function of GAM8678 is therefore inhibition of Breast cancer 1, early onset (BRCA1, Accession NP_009225.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BRCA1.

[61420] Breast cancer 1, early onset (BRCA1, Accession

NP_009235.1) is another GAM8678 target gene, herein designated TARGET GENE. BRCA1 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by BRCA1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BRCA1 BINDING SITE, designated SEQ ID:16053, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61421] Another function of GAM8678 is therefore inhibition of Breast cancer 1, early onset (BRCA1, Accession NP_009235.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BRCA1.

[61422] Breast cancer 1, early onset (BRCA1, Accession NP_009227.1) is another GAM8678 target gene, herein designated TARGET GENE. BRCA1 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by BRCA1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

BRCA1 BINDING SITE, designated SEQ ID:16053, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61423] Another function of GAM8678 is therefore inhibition of Breast cancer 1, early onset (BRCA1, Accession NP_009227.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BRCA1.

[61424] Breast cancer 1, early onset (BRCA1, Accession NP_009236.1) is another GAM8678 target gene, herein designated TARGET GENE. BRCA1 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by BRCA1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BRCA1 BINDING SITE, designated SEQ ID:16053, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61425] Another function of GAM8678 is therefore inhibition of Breast cancer 1, early onset (BRCA1, Accession NP_009236.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical

cal conditions associated with BRCA1.

[61426] Breast cancer 1, early onset (BRCA1, Accession NP_009231.1) is another GAM8678 target gene, herein designated TARGET GENE. BRCA1 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by BRCA1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BRCA1 BINDING SITE, designated SEQ ID:16053, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61427] Another function of GAM8678 is therefore inhibition of Breast cancer 1, early onset (BRCA1, Accession NP_009231.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BRCA1.

[61428] Breast cancer 1, early onset (BRCA1, Accession NP_009233.1) is another GAM8678 target gene, herein designated TARGET GENE. BRCA1 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by BRCA1, corresponding to a target binding site such as BINDING SITE I, BIND-

ING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BRCA1 BINDING SITE, designated SEQ ID:16053, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61429] Another function of GAM8678 is therefore inhibition of Breast cancer 1, early onset (BRCA1, Accession NP_009233.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BRCA1.

[61430] Breast cancer 1, early onset (BRCA1, Accession NP_009229.1) is another GAM8678 target gene, herein designated TARGET GENE. BRCA1 BINDING SITE is a target binding site found in the 5` untranslated region of multiple transcripts of mRNA encoded by BRCA1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BRCA1 BINDING SITE, designated SEQ ID:16053, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61431] Another function of GAM8678 is therefore inhibition of Breast cancer 1, early onset (BRCA1, Accession

NP_009229.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BRCA1.

[61432] Breast cancer 1, early onset (BRCA1, Accession NP_009232.1) is another GAM8678 target gene, herein designated TARGET GENE. BRCA1 BINDING SITE is a target binding site found in the 5` untranslated region of multiple transcripts of mRNA encoded by BRCA1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BRCA1 BINDING SITE, designated SEQ ID:16053, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61433] Another function of GAM8678 is therefore inhibition of Breast cancer 1, early onset (BRCA1, Accession NP_009232.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BRCA1.

[61434] Breast cancer 1, early onset (BRCA1, Accession NP_009237.1) is another GAM8678 target gene, herein designated TARGET GENE. BRCA1 BINDING SITE is a target binding site found in the 5` untranslated region of multi-

ple transcripts of mRNA encoded by BRCA1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BRCA1 BINDING SITE, designated SEQ ID:16053, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61435] Another function of GAM8678 is therefore inhibition of Breast cancer 1, early onset (BRCA1, Accession NP_009237.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BRCA1.

[61436] Breast cancer 1, early onset (BRCA1, Accession NP_009234.1) is another GAM8678 target gene, herein designated TARGET GENE. BRCA1 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by BRCA1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BRCA1 BINDING SITE, designated SEQ ID:16053, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61437] Another function of GAM8678 is therefore inhibition of Breast cancer 1, early onset (BRCA1, Accession NP_009234.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BRCA1.

[61438] Breast cancer 1, early onset (BRCA1, Accession NP_009228.1) is another GAM8678 target gene, herein designated TARGET GENE. BRCA1 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by BRCA1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of BRCA1 BINDING SITE, designated SEQ ID:16053, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61439] Another function of GAM8678 is therefore inhibition of Breast cancer 1, early onset (BRCA1, Accession NP_009228.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with BRCA1.

[61440] C14orf73 (Accession XP_040910.3) is another GAM8678 target gene, herein designated TARGET GENE. C14orf73

BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by C14orf73, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C14orf73 BINDING SITE, designated SEQ ID:1099, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61441] Another function of GAM8678 is therefore inhibition of C14orf73 (Accession XP_040910.3) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C14orf73.

[61442] Chromosome 20 open reading frame 142 (C20orf142, Accession XP_300782.1) is another GAM8678 target gene, herein designated TARGET GENE. C20orf142 BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by C20orf142, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C20orf142 BINDING SITE, designated SEQ ID:14457, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA,

also designated SEQ ID:347.

[61443] Another function of GAM8678 is therefore inhibition of Chromosome 20 open reading frame 142 (C20orf142, Accession XP_300782.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C20orf142.

[61444] Chromosome 20 open reading frame 155 (C20orf155, Accession NP_061968.1) is another GAM8678 target gene, herein designated TARGET GENE. C20orf155 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by C20orf155, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C20orf155 BINDING SITE, designated SEQ ID:13151, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61445] Another function of GAM8678 is therefore inhibition of Chromosome 20 open reading frame 155 (C20orf155, Accession NP_061968.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C20orf155.

[61446] Chromosome 21 open reading frame 81 (C21orf81, Ac-

cession NP_715631.1) is another GAM8678 target gene, herein designated TARGET GENE. C21orf81 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by C21orf81, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C21orf81 BINDING SITE, designated SEQ ID:14253, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61447] Another function of GAM8678 is therefore inhibition of Chromosome 21 open reading frame 81 (C21orf81, Accession NP_715631.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C21orf81.

[61448] Chromosome 4 open reading frame 6 (C4orf6, Accession NP_005741.1) is another GAM8678 target gene, herein designated TARGET GENE. C4orf6 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by C4orf6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C4orf6 BINDING SITE, designated

SEQ ID:2254, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61449] Another function of GAM8678 is therefore inhibition of Chromosome 4 open reading frame 6 (C4orf6, Accession NP_005741.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C4orf6.

[61450] Chromosome 5 open reading frame 5 (C5orf5, Accession NP_057687.1) is another GAM8678 target gene, herein designated TARGET GENE. C5orf5 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C5orf5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C5orf5 BINDING SITE, designated SEQ ID:19983, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61451] Another function of GAM8678 is therefore inhibition of Chromosome 5 open reading frame 5 (C5orf5, Accession NP_057687.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical

cal conditions associated with C5orf5.

[61452] Chromosome 5 open reading frame 6 (C5orf6, Accession NP_057689.1) is another GAM8678 target gene, herein designated TARGET GENE. C5orf6 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by C5orf6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of C5orf6 BINDING SITE, designated SEQ ID:5117, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61453] Another function of GAM8678 is therefore inhibition of Chromosome 5 open reading frame 6 (C5orf6, Accession NP_057689.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with C5orf6.

[61454] Caspase recruitment domain family, member 15 (CARD15, Accession NP_071445.1) is another GAM8678 target gene, herein designated TARGET GENE. CARD15 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CARD15, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or

BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CARD15 BINDING SITE, designated SEQ ID:7952, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61455] Another function of GAM8678 is therefore inhibition of Caspase recruitment domain family, member 15 (CARD15, Accession NP_071445.1), a gene which serves as an intracellular receptor for bacterial products in monocytes and transduces signals leading to NFkB activation. and therefore is associated with Blau syndrome. Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of Blau syndrome, and of other diseases and clinical conditions associated with CARD15.

[61456] The function of CARD15 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM374.2.Caspase recruitment domain family, member 9 (CARD9, Accession NP_434701.1) is another GAM8678 target gene, herein designated TARGET GENE. CARD9 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by CARD9, corresponding to a target binding site

such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CARD9 BINDING SITE, designated SEQ ID:18998, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61457] Another function of GAM8678 is therefore inhibition of Caspase recruitment domain family, member 9 (CARD9, Accession NP_434701.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CARD9.

[61458] Caspase recruitment domain family, member 9 (CARD9, Accession NP_434700.1) is another GAM8678 target gene, herein designated TARGET GENE. CARD9 BINDING SITE is a target binding site found in the 5` untranslated region of multiple transcripts of mRNA encoded by CARD9, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CARD9 BINDING SITE, designated SEQ ID:18998, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61459] Another function of GAM8678 is therefore inhibition of

Caspase recruitment domain family, member 9 (CARD9, Accession NP_434700.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CARD9.

[61460] Caspase recruitment domain family, member 9 (CARD9, Accession NP_071747.2) is another GAM8678 target gene, herein designated TARGET GENE. CARD9 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by CARD9, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CARD9 BINDING SITE, designated SEQ ID:18998, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61461] Another function of GAM8678 is therefore inhibition of Caspase recruitment domain family, member 9 (CARD9, Accession NP_071747.2) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CARD9.

[61462] Carbonyl reductase 1 (CBR1, Accession NP_001748.1) is another GAM8678 target gene, herein designated TARGET GENE. CBR1 BINDING SITE is a target binding site found in

the 5' untranslated region of mRNA encoded by CBR1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CBR1 BINDING SITE, designated SEQ ID:3247, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61463] Another function of GAM8678 is therefore inhibition of Carbonyl reductase 1 (CBR1, Accession NP_001748.1), a gene which catalyze the reduction of a wide variety of carbonyl compounds including the antitumor anthracycline antibiotics. Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CBR1.

[61464] The function of CBR1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM139.1.CDCP1 (Accession NP_073753.3) is another GAM8678 target gene, herein designated TARGET GENE. CDCP1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CDCP1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III

of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CDCP1 BINDING SITE, designated SEQ ID:4987, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61465] Another function of GAM8678 is therefore inhibition of CDCP1 (Accession NP_073753.3) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CDCP1.

[61466] Cyclin-dependent kinase inhibitor 2a (melanoma, p16, inhibits cdk4) (CDKN2A, Accession NP_478104.1) is another GAM8678 target gene, herein designated TARGET GENE. CDKN2A BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CDKN2A, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CDKN2A BINDING SITE, designated SEQ ID:18494, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61467] Another function of GAM8678 is therefore inhibition of Cyclin-dependent kinase inhibitor 2a (melanoma, p16, in-

hibits cdk4) (CDKN2A, Accession NP_478104.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CDKN2A.

[61468] Cyclin-dependent kinase inhibitor 2b (p15, inhibits cdk4) (CDKN2B, Accession NP_511042.1) is another GAM8678 target gene, herein designated TARGET GENE. CDKN2B BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by CDKN2B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CDKN2B BINDING SITE, designated SEQ ID:18494, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61469] Another function of GAM8678 is therefore inhibition of Cyclin-dependent kinase inhibitor 2b (p15, inhibits cdk4) (CDKN2B, Accession NP_511042.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CDKN2B.

[61470] Cerebellar degeneration-related protein 1, 34kda (CDR1,

Accession NP_004056.1) is another GAM8678 target gene, herein designated TARGET GENE. CDR1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CDR1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CDR1 BINDING SITE, designated SEQ ID:18037, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61471] Another function of GAM8678 is therefore inhibition of Cerebellar degeneration-related protein 1, 34kda (CDR1, Accession NP_004056.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CDR1.

[61472] Carcinoembryonic antigen-related cell adhesion molecule 1 (biliary glycoprotein) (CEACAM1, Accession NP_001703.2) is another GAM8678 target gene, herein designated TARGET GENE. CEACAM1 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by CEACAM1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the comple-

mentarity of the nucleotide sequences of CEACAM1 BINDING SITE, designated SEQ ID:13671, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61473] Another function of GAM8678 is therefore inhibition of Carcinoembryonic antigen-related cell adhesion molecule 1 (biliary glycoprotein) (CEACAM1, Accession NP_001703.2), a gene which is a major effector of VEGF and may be a target for the inhibition of tumor angiogenesis. Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CEACAM1.

[61474] The function of CEACAM1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM335.2. Carcinoembryonic antigen-related cell adhesion molecule 5 (CEACAM5, Accession NP_004354.1) is another GAM8678 target gene, herein designated TARGET GENE. CEACAM5 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by CEACAM5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of CEACAM5 BINDING SITE, designated SEQ ID:12584, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61475] Another function of GAM8678 is therefore inhibition of Carcinoembryonic antigen-related cell adhesion molecule 5 (CEACAM5, Accession NP_004354.1), a gene which is a complex immunoreactive glycoprotein and therefore may be associated with Liver metastasis. Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of Liver metastasis, and of other diseases and clinical conditions associated with CEACAM5.

[61476] The function of CEACAM5 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM347.1.Cgg triplet repeat binding protein 1 (CGGBP1, Accession NP_003654.2) is another GAM8678 target gene, herein designated TARGET GENE. CGGBP1 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by CGGBP1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

CGGBP1 BINDING SITE, designated SEQ ID:14778, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61477] Another function of GAM8678 is therefore inhibition of Cgg triplet repeat binding protein 1 (CGGBP1, Accession NP_003654.2) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CGGBP1.

[61478] Carbohydrate (n-acetylglucosamine 6-o) sulfotransferase 5 (CHST5, Accession NP_036258.1) is another GAM8678 target gene, herein designated TARGET GENE. CHST5 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by CHST5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CHST5 BINDING SITE, designated SEQ ID:9412, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61479] Another function of GAM8678 is therefore inhibition of Carbohydrate (n-acetylglucosamine 6-o) sulfotransferase 5 (CHST5, Accession NP_036258.1), a gene which may be involved in sulfation of glycoproteins and proteoglycans.

Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CHST5.

[61480] The function of CHST5 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM175.1. Carbohydrate (n-acetylglucosamine 6-o) sulfotransferase 6 (CHST6, Accession NP_067628.1) is another GAM8678 target gene, herein designated TARGET GENE. CHST6 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CHST6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CHST6 BINDING SITE, designated SEQ ID:20149, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61481] Another function of GAM8678 is therefore inhibition of Carbohydrate (n-acetylglucosamine 6-o) sulfotransferase 6 (CHST6, Accession NP_067628.1). Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CHST6.

[61482] Claudin 12 (CLDN12, Accession NP_036261.1) is another GAM8678 target gene, herein designated TARGET GENE. CLDN12 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by CLDN12, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CLDN12 BINDING SITE, designated SEQ ID:8628, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61483] Another function of GAM8678 is therefore inhibition of Claudin 12 (CLDN12, Accession NP_036261.1). Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CLDN12.

[61484] Cannabinoid receptor 2 (macrophage) (CNR2, Accession NP_001832.1) is another GAM8678 target gene, herein designated TARGET GENE. CNR2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CNR2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CNR2 BINDING SITE, designated

SEQ ID:11056, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61485] Another function of GAM8678 is therefore inhibition of Cannabinoid receptor 2 (macrophage) (CNR2, Accession NP_001832.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CNR2.

[61486] Collagen, type xvii, alpha 1 (COL17A1, Accession NP_000485.2) is another GAM8678 target gene, herein designated TARGET GENE. COL17A1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by COL17A1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of COL17A1 BINDING SITE, designated SEQ ID:6300, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61487] Another function of GAM8678 is therefore inhibition of Collagen, type xvii, alpha 1 (COL17A1, Accession NP_000485.2) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical

cal conditions associated with COL17A1.

[61488] Collectin sub-family member 12 (COLEC12, Accession NP_110408.2) is another GAM8678 target gene, herein designated TARGET GENE. COLEC12 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by COLEC12, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of COLEC12 BINDING SITE, designated SEQ ID:19564, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61489] Another function of GAM8678 is therefore inhibition of Collectin sub-family member 12 (COLEC12, Accession NP_110408.2) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with COLEC12.

[61490] Collectin sub-family member 12 (COLEC12, Accession NP_569057.1) is another GAM8678 target gene, herein designated TARGET GENE. COLEC12 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by COLEC12, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of COLEC12 BINDING SITE, designated SEQ ID:19564, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61491] Another function of GAM8678 is therefore inhibition of Collectin sub-family member 12 (COLEC12, Accession NP_569057.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with COLEC12.

[61492] Cellular repressor of e1a-stimulated genes (CREG, Accession NP_003842.1) is another GAM8678 target gene, herein designated TARGET GENE. CREG BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by CREG, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CREG BINDING SITE, designated SEQ ID:5534, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61493] Another function of GAM8678 is therefore inhibition of Cellular repressor of e1a-stimulated genes (CREG, Acces-

sion NP_003842.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CREG.

[61494] Cytochrome p450, subfamily ivb, polypeptide 1 (CYP4B1, Accession NP_000770.1) is another GAM8678 target gene, herein designated TARGET GENE. CYP4B1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by CYP4B1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of CYP4B1 BINDING SITE, designated SEQ ID:16905, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61495] Another function of GAM8678 is therefore inhibition of Cytochrome p450, subfamily ivb, polypeptide 1 (CYP4B1, Accession NP_000770.1), a gene which intervenes in an NADPH- dependent electron transport pathway. Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with CYP4B1.

[61496] The function of CYP4B1 and its association with various diseases and clinical conditions, has been established by

previous studies, as described hereinabove with reference to GAM1035.1. Doublecortin; lissencephaly, x-linked (doublecortin) (DCX, Accession NP_000546.2) is another GAM8678 target gene, herein designated TARGET GENE. DCX BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by DCX, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DCX BINDING SITE, designated SEQ ID:18999, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61497] Another function of GAM8678 is therefore inhibition of Doublecortin; lissencephaly, x-linked (doublecortin) (DCX, Accession NP_000546.2). Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DCX.

[61498] Doublecortin; lissencephaly, x-linked (doublecortin) (DCX, Accession NP_835365.1) is another GAM8678 target gene, herein designated TARGET GENE. DCX BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by DCX, corresponding to a target binding site such as BINDING

SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DCX BINDING SITE, designated SEQ ID:18999, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61499] Another function of GAM8678 is therefore inhibition of Doublecortex; lissencephaly, x-linked (doublecortin) (DCX, Accession NP_835365.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DCX.

[61500] Doublecortex; lissencephaly, x-linked (doublecortin) (DCX, Accession NP_835366.1) is another GAM8678 target gene, herein designated TARGET GENE. DCX BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by DCX, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DCX BINDING SITE, designated SEQ ID:18999, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61501] Another function of GAM8678 is therefore inhibition of Doublecortex; lissencephaly, x-linked (doublecortin)

(DCX, Accession NP_835366.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DCX.

[61502] Doublecortex; lissencephaly, x-linked (doublecortin) (DCX, Accession NP_835364.1) is another GAM8678 target gene, herein designated TARGET GENE. DCX BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by DCX, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DCX BINDING SITE, designated SEQ ID:18999, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61503] Another function of GAM8678 is therefore inhibition of Doublecortex; lissencephaly, x-linked (doublecortin) (DCX, Accession NP_835364.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DCX.

[61504] Digeorge syndrome critical region gene 9 (DGCR9, Accession XP_097827.1) is another GAM8678 target gene, herein designated TARGET GENE. DGCR9 BINDING SITE is a target binding site found in the 3' untranslated region of

mRNA encoded by DGCR9, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DGCR9 BINDING SITE, designated SEQ ID:17341, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61505] Another function of GAM8678 is therefore inhibition of Digorge syndrome critical region gene 9 (DGCR9, Accession XP_097827.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DGCR9.

[61506] DKFZP434F0318 (Accession NP_110444.1) is another GAM8678 target gene, herein designated TARGET GENE. DKFZP434F0318 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZP434F0318, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP434F0318 BINDING SITE, designated SEQ ID:9302, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61507] Another function of GAM8678 is therefore inhibition of DKFZP434F0318 (Accession NP_110444.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZP434F0318.

[61508] DKFZP434G1411 (Accession XP_166383.1) is another GAM8678 target gene, herein designated TARGET GENE. DKFZP434G1411 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZP434G1411, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP434G1411 BINDING SITE, designated SEQ ID:1085, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61509] Another function of GAM8678 is therefore inhibition of DKFZP434G1411 (Accession XP_166383.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZP434G1411.

[61510] DKFZP564C103 (Accession NP_056469.2) is another GAM8678 target gene, herein designated TARGET GENE.

DKFZP564C103 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZP564C103, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP564C103 BINDING SITE, designated SEQ ID:8255, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61511] Another function of GAM8678 is therefore inhibition of DKFZP564C103 (Accession NP_056469.2) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZP564C103.

[61512] DKFZP586M1120 (Accession NP_112584.1) is another GAM8678 target gene, herein designated TARGET GENE. DKFZP586M1120 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZP586M1120, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZP586M1120 BINDING SITE, designated SEQ ID:9451, to the nucleotide sequence of

GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61513] Another function of GAM8678 is therefore inhibition of DKFZP586M1120 (Accession NP_112584.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZP586M1120.

[61514] DKFZp667E0512 (Accession XP_117353.1) is another GAM8678 target gene, herein designated TARGET GENE. DKFZp667E0512 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by DKFZp667E0512, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp667E0512 BINDING SITE, designated SEQ ID:4910, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61515] Another function of GAM8678 is therefore inhibition of DKFZp667E0512 (Accession XP_117353.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp667E0512.

[61516] DKFZp761K1423 (Accession NP_060892.1) is another GAM8678 target gene, herein designated TARGET GENE. DKFZp761K1423 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by DKFZp761K1423, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of DKFZp761K1423 BINDING SITE, designated SEQ ID:16429, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61517] Another function of GAM8678 is therefore inhibition of DKFZp761K1423 (Accession NP_060892.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with DKFZp761K1423.

[61518] Dystrobrevin, alpha (DTNA, Accession NP_116763.1) is another GAM8678 target gene, herein designated TARGET GENE. DTNA BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by DTNA, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementar-

ity of the nucleotide sequences of DTNA BINDING SITE, designated SEQ ID:7785, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61519] Another function of GAM8678 is therefore inhibition of Dystrobrevin, alpha (DTNA, Accession NP_116763.1), a gene which may be involved in the formation and stability of synapses. and therefore may be associated with Limb-girdle muscular dystrophy and congenital heart defects. Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of Limb-girdle muscular dystrophy and congenital heart defects., and of other diseases and clinical conditions associated with DTNA.

[61520] The function of DTNA and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM492.2.Dystrobrevin, alpha (DTNA, Accession NP_116762.1) is another GAM8678 target gene, herein designated TARGET GENE. DTNA BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by DTNA, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the

complementarity of the nucleotide sequences of DTNA BINDING SITE, designated SEQ ID:7785, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61521] Another function of GAM8678 is therefore inhibition of Dystrobrevin, alpha (DTNA, Accession NP_116762.1), a gene which may be involved in the formation and stability of synapses. and therefore may be associated with Limb-girdle muscular dystrophy and congenital heart defects. Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of Limb-girdle muscular dystrophy and congenital heart defects., and of other diseases and clinical conditions associated with DTNA.

[61522] The function of DTNA and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM492.2.EAT2 (Accession NP_444512.1) is another GAM8678 target gene, herein designated TARGET GENE. EAT2 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by EAT2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

EAT2 BINDING SITE, designated SEQ ID:9613, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61523] Another function of GAM8678 is therefore inhibition of EAT2 (Accession NP_444512.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with EAT2.

[61524] Ephrin-a5 (EFNA5, Accession NP_001953.1) is another GAM8678 target gene, herein designated TARGET GENE. EFNA5 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by EFNA5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of EFNA5 BINDING SITE, designated SEQ ID:2962, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61525] Another function of GAM8678 is therefore inhibition of Ephrin-a5 (EFNA5, Accession NP_001953.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with EFNA5.

[61526] E1a binding protein p300 (EP300, Accession

NP_001420.1) is another GAM8678 target gene, herein designated TARGET GENE. EP300 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by EP300, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of EP300 BINDING SITE, designated SEQ ID:5735, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61527] Another function of GAM8678 is therefore inhibition of E1a binding protein p300 (EP300, Accession NP_001420.1), a gene which may have a function in cell cycle regulation. and therefore may be associated with Colorectal cancer. Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of Colorectal cancer, and of other diseases and clinical conditions associated with EP300.

[61528] The function of EP300 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM473.1.Coagulation factor xiii, a1 polypeptide (F13A1, Accession NP_000120.1) is another GAM8678

target gene, herein designated TARGET GENE. F13A1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by F13A1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of F13A1 BINDING SITE, designated SEQ ID:5593, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61529] Another function of GAM8678 is therefore inhibition of Coagulation factor xiii, a1 polypeptide (F13A1, Accession NP_000120.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with F13A1.

[61530] Ferm, rhogef (arhgef) and pleckstrin domain protein 1 (chondrocyte-derived) (FARP1, Accession NP_005757.1) is another GAM8678 target gene, herein designated TARGET GENE. FARP1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FARP1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FARP1 BINDING SITE, designated SEQ

ID:14652, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61531] Another function of GAM8678 is therefore inhibition of Ferm, rhogef (arhgef) and pleckstrin domain protein 1 (chondrocyte-derived) (FARP1, Accession NP_005757.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FARP1.

[61532] FLJ00103 (Accession XP_036104.5) is another GAM8678 target gene, herein designated TARGET GENE. FLJ00103 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ00103, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ00103 BINDING SITE, designated SEQ ID:4563, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61533] Another function of GAM8678 is therefore inhibition of FLJ00103 (Accession XP_036104.5) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ00103.

[61534] FLJ00225 (Accession XP_084552.3) is another GAM8678 target gene, herein designated TARGET GENE. FLJ00225 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FLJ00225, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ00225 BINDING SITE, designated SEQ ID:19498, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61535] Another function of GAM8678 is therefore inhibition of FLJ00225 (Accession XP_084552.3). Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ00225.

[61536] FLJ10290 (Accession NP_060517.1) is another GAM8678 target gene, herein designated TARGET GENE. FLJ10290 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ10290, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ10290 BINDING SITE, designated SEQ ID:15918, to the

nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61537] Another function of GAM8678 is therefore inhibition of FLJ10290 (Accession NP_060517.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ10290.

[61538] FLJ10496 (Accession NP_060584.2) is another GAM8678 target gene, herein designated TARGET GENE. FLJ10496 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ10496, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ10496 BINDING SITE, designated SEQ ID:2494, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61539] Another function of GAM8678 is therefore inhibition of FLJ10496 (Accession NP_060584.2) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ10496.

[61540] FLJ11301 (Accession NP_060855.1) is another GAM8678

target gene, herein designated TARGET GENE. FLJ11301 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ11301, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ11301 BINDING SITE, designated SEQ ID:6745, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61541] Another function of GAM8678 is therefore inhibition of FLJ11301 (Accession NP_060855.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ11301.

[61542] FLJ11871 (Accession NP_079393.1) is another GAM8678 target gene, herein designated TARGET GENE. FLJ11871 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ11871, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ11871 BINDING SITE, designated SEQ ID:4130, to the nucleotide sequence of GAM8678 RNA, herein designated

GAM RNA, also designated SEQ ID:347.

[61543] Another function of GAM8678 is therefore inhibition of FLJ11871 (Accession NP_079393.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ11871.

[61544] FLJ12476 (Accession NP_073621.1) is another GAM8678 target gene, herein designated TARGET GENE. FLJ12476 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ12476, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ12476 BINDING SITE, designated SEQ ID:17053, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61545] Another function of GAM8678 is therefore inhibition of FLJ12476 (Accession NP_073621.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ12476.

[61546] FLJ13197 (Accession NP_078890.1) is another GAM8678 target gene, herein designated TARGET GENE. FLJ13197

BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ13197, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ13197 BINDING SITE, designated SEQ ID:9668, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61547] Another function of GAM8678 is therefore inhibition of FLJ13197 (Accession NP_078890.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ13197.

[61548] FLJ13744 (Accession NP_079287.1) is another GAM8678 target gene, herein designated TARGET GENE. FLJ13744 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ13744, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ13744 BINDING SITE, designated SEQ ID:7904, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61549] Another function of GAM8678 is therefore inhibition of FLJ13744 (Accession NP_079287.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ13744.

[61550] FLJ14001 (Accession NP_078953.2) is another GAM8678 target gene, herein designated TARGET GENE. FLJ14001 BINDING SITE is a target binding site found in the 5` un-translated region of mRNA encoded by FLJ14001, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ14001 BINDING SITE, designated SEQ ID:5786, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61551] Another function of GAM8678 is therefore inhibition of FLJ14001 (Accession NP_078953.2) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ14001.

[61552] FLJ20618 (Accession NP_060373.1) is another GAM8678 target gene, herein designated TARGET GENE. FLJ20618 BINDING SITE is a target binding site found in the 3` un-

translated region of mRNA encoded by FLJ20618, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20618 BINDING SITE, designated SEQ ID:8115, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61553] Another function of GAM8678 is therefore inhibition of FLJ20618 (Accession NP_060373.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20618.

[61554] FLJ20699 (Accession NP_060401.1) is another GAM8678 target gene, herein designated TARGET GENE. FLJ20699 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ20699, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ20699 BINDING SITE, designated SEQ ID:18495, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61555] Another function of GAM8678 is therefore inhibition of

FLJ20699 (Accession NP_060401.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ20699.

[61556] FLJ22031 (Accession NP_079350.1) is another GAM8678 target gene, herein designated TARGET GENE. FLJ22031 BINDING SITE1 and FLJ22031 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ22031, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ22031 BINDING SITE1 and FLJ22031 BINDING SITE2, designated SEQ ID:6101 and SEQ ID:19363 respectively, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61557] Another function of GAM8678 is therefore inhibition of FLJ22031 (Accession NP_079350.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ22031.

[61558] FLJ22167 (Accession NP_078809.2) is another GAM8678 target gene, herein designated TARGET GENE. FLJ22167

BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by FLJ22167, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ22167 BINDING SITE, designated SEQ ID:9412, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61559] Another function of GAM8678 is therefore inhibition of FLJ22167 (Accession NP_078809.2) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ22167.

[61560] FLJ22246 (Accession NP_079508.2) is another GAM8678 target gene, herein designated TARGET GENE. FLJ22246 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by FLJ22246, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ22246 BINDING SITE, designated SEQ ID:11816, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61561] Another function of GAM8678 is therefore inhibition of FLJ22246 (Accession NP_079508.2) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ22246.

[61562] FLJ23342 (Accession NP_078907.1) is another GAM8678 target gene, herein designated TARGET GENE. FLJ23342 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ23342, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ23342 BINDING SITE, designated SEQ ID:18137, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61563] Another function of GAM8678 is therefore inhibition of FLJ23342 (Accession NP_078907.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ23342.

[61564] FLJ23614 (Accession NP_689908.2) is another GAM8678 target gene, herein designated TARGET GENE. FLJ23614 BINDING SITE is a target binding site found in the 3' un-

translated region of mRNA encoded by FLJ23614, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ23614 BINDING SITE, designated SEQ ID:5496, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61565] Another function of GAM8678 is therefore inhibition of FLJ23614 (Accession NP_689908.2) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ23614.

[61566] FLJ25410 (Accession NP_653206.1) is another GAM8678 target gene, herein designated TARGET GENE. FLJ25410 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FLJ25410, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ25410 BINDING SITE, designated SEQ ID:3189, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61567] Another function of GAM8678 is therefore inhibition of

FLJ25410 (Accession NP_653206.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ25410.

[61568] FLJ30313 (Accession NP_689970.1) is another GAM8678 target gene, herein designated TARGET GENE. FLJ30313 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by FLJ30313, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ30313 BINDING SITE, designated SEQ ID:12845, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61569] Another function of GAM8678 is therefore inhibition of FLJ30313 (Accession NP_689970.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ30313.

[61570] FLJ31364 (Accession NP_689676.1) is another GAM8678 target gene, herein designated TARGET GENE. FLJ31364 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ31364, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ31364 BINDING SITE, designated SEQ ID:14150, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61571] Another function of GAM8678 is therefore inhibition of FLJ31364 (Accession NP_689676.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ31364.

[61572] FLJ32063 (Accession NP_694576.1) is another GAM8678 target gene, herein designated TARGET GENE. FLJ32063 BINDING SITE1 and FLJ32063 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by FLJ32063, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ32063 BINDING SITE1 and FLJ32063 BINDING SITE2, designated SEQ ID:7129 and SEQ ID:12524 respectively, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61573] Another function of GAM8678 is therefore inhibition of FLJ32063 (Accession NP_694576.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ32063.

[61574] FLJ35487 (Accession NP_776181.1) is another GAM8678 target gene, herein designated TARGET GENE. FLJ35487 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by FLJ35487, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FLJ35487 BINDING SITE, designated SEQ ID:8392, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61575] Another function of GAM8678 is therefore inhibition of FLJ35487 (Accession NP_776181.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with FLJ35487.

[61576] Ferritin, heavy polypeptide 1 (FTH1, Accession NP_002023.1) is another GAM8678 target gene, herein designated TARGET GENE. FTH1 BINDING SITE is a target

binding site found in the 3' untranslated region of mRNA encoded by FTH1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of FTH1 BINDING SITE, designated SEQ ID:9044, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61577] Another function of GAM8678 is therefore inhibition of Ferritin, heavy polypeptide 1 (FTH1, Accession NP_002023.1), a gene which stores iron in a soluble, non-toxic, readily available form. and therefore is associated with Iron overload, autosomal dominant . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of Iron overload, autosomal dominant ., and of other diseases and clinical conditions associated with FTH1.

[61578] The function of FTH1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM3177.1.Gamma-glutamyltransferase 1 (GGT1, Accession NP_038347.1) is another GAM8678 target gene, herein designated TARGET GENE. GGT1 BINDING SITE is a

target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by GGT1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GGT1 BINDING SITE, designated SEQ ID:4886, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61579] Another function of GAM8678 is therefore inhibition of Gamma-glutamyltransferase 1 (GGT1, Accession NP_038347.1), a gene which catalyzes the transfer of the glutamyl moiety of glutathione to a variety of amino acids and dipeptide acceptors and therefore is associated with Glutathionuria. Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of Glutathionuria, and of other diseases and clinical conditions associated with GGT1.

[61580] The function of GGT1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM234.1. Guanine nucleotide binding protein (g protein), alpha inhibiting activity polypeptide 2 (GNAI2, Accession NP_002061.1) is another GAM8678 target gene,

herein designated TARGET GENE. GNAI2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GNAI2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GNAI2 BINDING SITE, designated SEQ ID:12292, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61581] Another function of GAM8678 is therefore inhibition of Guanine nucleotide binding protein (g protein), alpha inhibiting activity polypeptide 2 (GNAI2, Accession NP_002061.1), a gene which is a human G- alpha inhibitory protein and therefore may be associated with Adrenal cortical tumor. Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of Adrenal cortical tumor, and of other diseases and clinical conditions associated with GNAI2.

[61582] The function of GNAI2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM71.1. Granulysin (GNLY, Accession NP_036615.1) is another GAM8678 target gene, herein designated TARGET

GENE. GNLY BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by GNLY, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GNLY BINDING SITE, designated SEQ ID:10225, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61583] Another function of GAM8678 is therefore inhibition of Granulysin (GNLY, Accession NP_036615.1). Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GNLY.

[61584] Glycoprotein a33 (transmembrane) (GPA33, Accession NP_005805.1) is another GAM8678 target gene, herein designated TARGET GENE. GPA33 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GPA33, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GPA33 BINDING SITE, designated SEQ ID:8463, to the nucleotide sequence of GAM8678

RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61585] Another function of GAM8678 is therefore inhibition of Glycoprotein a33 (transmembrane) (GPA33, Accession NP_005805.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GPA33.

[61586] G protein-coupled receptor 81 (GPR81, Accession NP_115943.1) is another GAM8678 target gene, herein designated TARGET GENE. GPR81 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by GPR81, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GPR81 BINDING SITE, designated SEQ ID:13989, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61587] Another function of GAM8678 is therefore inhibition of G protein-coupled receptor 81 (GPR81, Accession NP_115943.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GPR81.

[61588] G protein-coupled receptor 86 (GPR86, Accession NP_795713.1) is another GAM8678 target gene, herein designated TARGET GENE. GPR86 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by GPR86, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GPR86 BINDING SITE, designated SEQ ID:9168, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61589] Another function of GAM8678 is therefore inhibition of G protein-coupled receptor 86 (GPR86, Accession NP_795713.1), a gene which plays a role in cell communication. Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GPR86.

[61590] The function of GPR86 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM592.1. G protein-coupled receptor 86 (GPR86, Accession NP_076403.2) is another GAM8678 target gene, herein designated TARGET GENE. GPR86 BINDING SITE is a

target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by GPR86, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GPR86 BINDING SITE, designated SEQ ID:9168, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61591] Another function of GAM8678 is therefore inhibition of G protein-coupled receptor 86 (GPR86, Accession NP_076403.2), a gene which plays a role in cell communication. Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GPR86.

[61592] The function of GPR86 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM592.1. Grip1 associated protein 1 (GRIPAP1, Accession NP_064522.2) is another GAM8678 target gene, herein designated TARGET GENE. GRIPAP1 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by GRIPAP1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or

BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of GRIPAP1 BINDING SITE, designated SEQ ID:474, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61593] Another function of GAM8678 is therefore inhibition of Grip1 associated protein 1 (GRIPAP1, Accession NP_064522.2) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with GRIPAP1.

[61594] Histone deacetylase 9 (HDAC9, Accession NP_055522.1) is another GAM8678 target gene, herein designated TARGET GENE. HDAC9 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by HDAC9, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HDAC9 BINDING SITE, designated SEQ ID:747, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61595] Another function of GAM8678 is therefore inhibition of Histone deacetylase 9 (HDAC9, Accession NP_055522.1) .

Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HDAC9.

[61596] Homeo box a1 (HOXA1, Accession NP_705873.1) is another GAM8678 target gene, herein designated TARGET GENE. HOXA1 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by HOXA1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HOXA1 BINDING SITE, designated SEQ ID:16330, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61597] Another function of GAM8678 is therefore inhibition of Homeo box a1 (HOXA1, Accession NP_705873.1). Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HOXA1.

[61598] HPS6 (Accession NP_079023.1) is another GAM8678 target gene, herein designated TARGET GENE. HPS6 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by HPS6, corresponding to a tar-

get binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HPS6 BINDING SITE, designated SEQ ID:16321, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61599] Another function of GAM8678 is therefore inhibition of HPS6 (Accession NP_079023.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HPS6.

[61600] HSPC023 (Accession NP_054766.1) is another GAM8678 target gene, herein designated TARGET GENE. HSPC023 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HSPC023, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HSPC023 BINDING SITE, designated SEQ ID:3781, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61601] Another function of GAM8678 is therefore inhibition of HSPC023 (Accession NP_054766.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment

of diseases and clinical conditions associated with HSPC023.

[61602] HSPC063 (Accession NP_054874.1) is another GAM8678 target gene, herein designated TARGET GENE. HSPC063 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HSPC063, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of HSPC063 BINDING SITE, designated SEQ ID:7756, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61603] Another function of GAM8678 is therefore inhibition of HSPC063 (Accession NP_054874.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HSPC063.

[61604] HUMPPA (Accession XP_290730.2) is another GAM8678 target gene, herein designated TARGET GENE. HUMPPA BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by HUMPPA, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of HUMPPA BINDING SITE, designated SEQ ID:3912, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61605] Another function of GAM8678 is therefore inhibition of HUMPPA (Accession XP_290730.2) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with HUMPPA.

[61606] IL2-inducible t-cell kinase (ITK, Accession NP_005537.3) is another GAM8678 target gene, herein designated TARGET GENE. ITK BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ITK, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ITK BINDING SITE, designated SEQ ID:14377, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61607] Another function of GAM8678 is therefore inhibition of IL2-inducible t-cell kinase (ITK, Accession NP_005537.3), a gene which plays a role in t cell proliferation and differentiation. and therefore may be associated with Myelodys-

plastic syndrome. Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of Myelodysplastic syndrome, and of other diseases and clinical conditions associated with ITK.

[61608] The function of ITK and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM44.1.JPHL1 (Accession XP_033366.1) is another GAM8678 target gene, herein designated TARGET GENE. JPHL1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by JPHL1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of JPHL1 BINDING SITE, designated SEQ ID:2745, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61609] Another function of GAM8678 is therefore inhibition of JPHL1 (Accession XP_033366.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with JPHL1.

[61610] KIAA0258 (Accession NP_055600.1) is another GAM8678 target gene, herein designated TARGET GENE. KIAA0258

BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0258, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0258 BINDING SITE, designated SEQ ID:824, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61611] Another function of GAM8678 is therefore inhibition of KIAA0258 (Accession NP_055600.1). Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0258.

[61612] KIAA0664 (Accession NP_056044.1) is another GAM8678 target gene, herein designated TARGET GENE. KIAA0664 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA0664, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA0664 BINDING SITE, designated SEQ ID:13478, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61613] Another function of GAM8678 is therefore inhibition of KIAA0664 (Accession NP_056044.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA0664.

[61614] KIAA1033 (Accession XP_035313.5) is another GAM8678 target gene, herein designated TARGET GENE. KIAA1033 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1033, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1033 BINDING SITE, designated SEQ ID:16075, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61615] Another function of GAM8678 is therefore inhibition of KIAA1033 (Accession XP_035313.5) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1033.

[61616] KIAA1069 (Accession XP_042635.3) is another GAM8678 target gene, herein designated TARGET GENE. KIAA1069 BINDING SITE is a target binding site found in the 3' un-

translated region of mRNA encoded by KIAA1069, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1069 BINDING SITE, designated SEQ ID:12231, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61617] Another function of GAM8678 is therefore inhibition of KIAA1069 (Accession XP_042635.3) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1069.

[61618] KIAA1172 (Accession XP_047889.5) is another GAM8678 target gene, herein designated TARGET GENE. KIAA1172 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1172, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1172 BINDING SITE, designated SEQ ID:19048, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61619] Another function of GAM8678 is therefore inhibition of

KIAA1172 (Accession XP_047889.5) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1172.

[61620] KIAA1404 (Accession NP_066363.1) is another GAM8678 target gene, herein designated TARGET GENE. KIAA1404 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1404, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1404 BINDING SITE, designated SEQ ID:18334, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61621] Another function of GAM8678 is therefore inhibition of KIAA1404 (Accession NP_066363.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1404.

[61622] KIAA1673 (Accession XP_047672.4) is another GAM8678 target gene, herein designated TARGET GENE. KIAA1673 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1673, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1673 BINDING SITE, designated SEQ ID:3546, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61623] Another function of GAM8678 is therefore inhibition of KIAA1673 (Accession XP_047672.4) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1673.

[61624] KIAA1679 (Accession XP_046570.3) is another GAM8678 target gene, herein designated TARGET GENE. KIAA1679 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1679, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1679 BINDING SITE, designated SEQ ID:12115, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61625] Another function of GAM8678 is therefore inhibition of KIAA1679 (Accession XP_046570.3) . Accordingly, utilities

of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1679.

[61626] KIAA1908 (Accession XP_055834.1) is another GAM8678 target gene, herein designated TARGET GENE. KIAA1908 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by KIAA1908, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1908 BINDING SITE, designated SEQ ID:13611, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61627] Another function of GAM8678 is therefore inhibition of KIAA1908 (Accession XP_055834.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1908.

[61628] KIAA1920 (Accession XP_085210.1) is another GAM8678 target gene, herein designated TARGET GENE. KIAA1920 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by KIAA1920, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1920 BINDING SITE, designated SEQ ID:11223, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61629] Another function of GAM8678 is therefore inhibition of KIAA1920 (Accession XP_085210.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1920.

[61630] KIAA1949 (Accession XP_300202.1) is another GAM8678 target gene, herein designated TARGET GENE. KIAA1949 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by KIAA1949, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1949 BINDING SITE, designated SEQ ID:1491, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61631] Another function of GAM8678 is therefore inhibition of KIAA1949 (Accession XP_300202.1) . Accordingly, utilities

of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1949.

[61632] KIAA1949 (Accession XP_166376.1) is another GAM8678 target gene, herein designated TARGET GENE. KIAA1949 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by KIAA1949, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1949 BINDING SITE, designated SEQ ID:1491, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61633] Another function of GAM8678 is therefore inhibition of KIAA1949 (Accession XP_166376.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1949.

[61634] KIAA1949 (Accession XP_300167.1) is another GAM8678 target gene, herein designated TARGET GENE. KIAA1949 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded

by KIAA1949, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1949 BINDING SITE, designated SEQ ID:1491, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61635] Another function of GAM8678 is therefore inhibition of KIAA1949 (Accession XP_300167.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1949.

[61636] KIAA1998 (Accession XP_068710.3) is another GAM8678 target gene, herein designated TARGET GENE. KIAA1998 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by KIAA1998, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of KIAA1998 BINDING SITE, designated SEQ ID:4429, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61637] Another function of GAM8678 is therefore inhibition of

KIAA1998 (Accession XP_068710.3) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with KIAA1998.

[61638] LAPTM4B (Accession NP_060877.3) is another GAM8678 target gene, herein designated TARGET GENE. LAPTM4B BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LAPTM4B, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LAPTM4B BINDING SITE, designated SEQ ID:3312, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61639] Another function of GAM8678 is therefore inhibition of LAPTM4B (Accession NP_060877.3) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LAPTM4B.

[61640] Lim domain kinase 1 (LIMK1, Accession NP_058015.1) is another GAM8678 target gene, herein designated TARGET GENE. LIMK1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of

mRNA encoded by LIMK1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LIMK1 BINDING SITE, designated SEQ ID:9080, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

- [61641] Another function of GAM8678 is therefore inhibition of Lim domain kinase 1 (LIMK1, Accession NP_058015.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LIMK1.
- [61642] Lim and senescent cell antigen-like domains 2 (LIMS2, Accession NP_060450.1) is another GAM8678 target gene, herein designated TARGET GENE. LIMS2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LIMS2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LIMS2 BINDING SITE, designated SEQ ID:4540, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61643] Another function of GAM8678 is therefore inhibition of Lim and senescent cell antigen-like domains 2 (LIMS2, Accession NP_060450.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LIMS2.

[61644] LOC128387 (Accession XP_059243.2) is another GAM8678 target gene, herein designated TARGET GENE. LOC128387 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC128387, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC128387 BINDING SITE, designated SEQ ID:6611, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61645] Another function of GAM8678 is therefore inhibition of LOC128387 (Accession XP_059243.2) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC128387.

[61646] LOC142779 (Accession XP_084337.1) is another GAM8678 target gene, herein designated TARGET GENE.

LOC142779 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC142779, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC142779 BINDING SITE, designated SEQ ID:18014, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61647] Another function of GAM8678 is therefore inhibition of LOC142779 (Accession XP_084337.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC142779.

[61648] LOC144248 (Accession XP_084786.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC144248 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC144248, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC144248 BINDING SITE, designated SEQ ID:5074, to the nucleotide sequence of

GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61649] Another function of GAM8678 is therefore inhibition of LOC144248 (Accession XP_084786.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC144248.

[61650] LOC144486 (Accession XP_096608.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC144486 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC144486, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC144486 BINDING SITE, designated SEQ ID:9860, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61651] Another function of GAM8678 is therefore inhibition of LOC144486 (Accession XP_096608.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC144486.

[61652] LOC144678 (Accession XP_096656.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC144678 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC144678, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC144678 BINDING SITE, designated SEQ ID:17626, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61653] Another function of GAM8678 is therefore inhibition of LOC144678 (Accession XP_096656.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC144678.

[61654] LOC145609 (Accession XP_096817.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC145609 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC145609, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC145609 BINDING SITE, designated SEQ ID:16478, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61655] Another function of GAM8678 is therefore inhibition of LOC145609 (Accession XP_096817.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC145609.

[61656] LOC150630 (Accession XP_097931.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC150630 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC150630, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC150630 BINDING SITE, designated SEQ ID:3341, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61657] Another function of GAM8678 is therefore inhibition of LOC150630 (Accession XP_097931.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC150630.

[61658] LOC152445 (Accession XP_098231.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC152445 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC152445, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC152445 BINDING SITE, designated SEQ ID:13305, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61659] Another function of GAM8678 is therefore inhibition of LOC152445 (Accession XP_098231.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC152445.

[61660] LOC153684 (Accession XP_098412.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC153684 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC153684, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC153684 BINDING SITE, designated SEQ ID:2941, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61661] Another function of GAM8678 is therefore inhibition of LOC153684 (Accession XP_098412.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC153684.

[61662] LOC154467 (Accession XP_166346.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC154467 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC154467, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC154467 BINDING SITE, designated SEQ ID:17572, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61663] Another function of GAM8678 is therefore inhibition of

LOC154467 (Accession XP_166346.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC154467.

[61664] LOC157376 (Accession XP_088301.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC157376 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC157376, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC157376 BINDING SITE, designated SEQ ID:12155, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61665] Another function of GAM8678 is therefore inhibition of LOC157376 (Accession XP_088301.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC157376.

[61666] LOC158107 (Accession XP_098873.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC158107 BINDING SITE is a target binding site found in

the 5' untranslated region of mRNA encoded by LOC158107, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC158107 BINDING SITE, designated SEQ ID:10149, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61667] Another function of GAM8678 is therefore inhibition of LOC158107 (Accession XP_098873.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC158107.

[61668] LOC158527 (Accession XP_088594.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC158527 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC158527, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC158527 BINDING SITE, designated SEQ ID:17834, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also design-

nated SEQ ID:347.

[61669] Another function of GAM8678 is therefore inhibition of LOC158527 (Accession XP_088594.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC158527.

[61670] LOC159121 (Accession XP_099028.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC159121 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC159121, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC159121 BINDING SITE, designated SEQ ID:15930, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61671] Another function of GAM8678 is therefore inhibition of LOC159121 (Accession XP_099028.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC159121.

[61672] LOC199777 (Accession NP_660340.1) is another

GAM8678 target gene, herein designated TARGET GENE. LOC199777 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC199777, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC199777 BINDING SITE, designated SEQ ID:13813, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61673] Another function of GAM8678 is therefore inhibition of LOC199777 (Accession NP_660340.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC199777.

[61674] LOC199796 (Accession XP_058994.3) is another GAM8678 target gene, herein designated TARGET GENE. LOC199796 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC199796, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC199796 BINDING SITE, design-

nated SEQ ID:16496, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61675] Another function of GAM8678 is therefore inhibition of LOC199796 (Accession XP_058994.3) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC199796.

[61676] LOC219397 (Accession XP_167889.2) is another GAM8678 target gene, herein designated TARGET GENE. LOC219397 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC219397, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC219397 BINDING SITE, designated SEQ ID:13531, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61677] Another function of GAM8678 is therefore inhibition of LOC219397 (Accession XP_167889.2) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC219397.

[61678] LOC220758 (Accession XP_165466.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC220758 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC220758, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC220758 BINDING SITE, designated SEQ ID:5833, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61679] Another function of GAM8678 is therefore inhibition of LOC220758 (Accession XP_165466.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC220758.

[61680] LOC221122 (Accession XP_167867.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC221122 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC221122, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC221122 BINDING SITE, designated SEQ ID:15261, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61681] Another function of GAM8678 is therefore inhibition of LOC221122 (Accession XP_167867.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC221122.

[61682] LOC253609 (Accession XP_172986.2) is another GAM8678 target gene, herein designated TARGET GENE. LOC253609 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC253609, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC253609 BINDING SITE, designated SEQ ID:9081, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61683] Another function of GAM8678 is therefore inhibition of LOC253609 (Accession XP_172986.2) . Accordingly, utili-

ties of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC253609.

[61684] LOC283012 (Accession XP_210847.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC283012 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC283012, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283012 BINDING SITE, designated SEQ ID:11131, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61685] Another function of GAM8678 is therefore inhibition of LOC283012 (Accession XP_210847.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283012.

[61686] LOC283351 (Accession XP_210988.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC283351 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by

LOC283351, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283351 BINDING SITE, designated SEQ ID:9921, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61687] Another function of GAM8678 is therefore inhibition of LOC283351 (Accession XP_210988.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283351.

[61688] LOC283500 (Accession XP_211067.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC283500 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC283500, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283500 BINDING SITE, designated SEQ ID:11164, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61689] Another function of GAM8678 is therefore inhibition of LOC283500 (Accession XP_211067.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283500.

[61690] LOC283568 (Accession XP_211098.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC283568 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283568, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283568 BINDING SITE, designated SEQ ID:5947, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61691] Another function of GAM8678 is therefore inhibition of LOC283568 (Accession XP_211098.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283568.

[61692] LOC283686 (Accession XP_211164.1) is another GAM8678 target gene, herein designated TARGET GENE.

LOC283686 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC283686, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283686 BINDING SITE, designated SEQ ID:10535, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61693] Another function of GAM8678 is therefore inhibition of LOC283686 (Accession XP_211164.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283686.

[61694] LOC283801 (Accession XP_208122.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC283801 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC283801, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283801 BINDING SITE, designated SEQ ID:19380, to the nucleotide sequence of

GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61695] Another function of GAM8678 is therefore inhibition of LOC283801 (Accession XP_208122.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283801.

[61696] LOC283806 (Accession XP_208846.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC283806 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC283806, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283806 BINDING SITE, designated SEQ ID:15140, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61697] Another function of GAM8678 is therefore inhibition of LOC283806 (Accession XP_208846.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283806.

[61698] LOC283863 (Accession XP_208875.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC283863 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283863, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283863 BINDING SITE, designated SEQ ID:14458, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61699] Another function of GAM8678 is therefore inhibition of LOC283863 (Accession XP_208875.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283863.

[61700] LOC283875 (Accession XP_211241.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC283875 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283875, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC283875 BINDING SITE, designated SEQ ID:1114, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61701] Another function of GAM8678 is therefore inhibition of LOC283875 (Accession XP_211241.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC283875.

[61702] LOC283927 (Accession XP_208904.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC283927 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC283927, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC283927 BINDING SITE, designated SEQ ID:3174, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61703] Another function of GAM8678 is therefore inhibition of LOC283927 (Accession XP_208904.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC283927.

[61704] LOC284046 (Accession XP_208155.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC284046 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC284046, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284046 BINDING SITE, designated SEQ ID:16474, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61705] Another function of GAM8678 is therefore inhibition of LOC284046 (Accession XP_208155.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284046.

[61706] LOC284473 (Accession XP_211474.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC284473 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284473, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284473 BINDING SITE, designated SEQ ID:14734, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61707] Another function of GAM8678 is therefore inhibition of LOC284473 (Accession XP_211474.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284473.

[61708] LOC284752 (Accession XP_211628.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC284752 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC284752, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC284752 BINDING SITE, designated SEQ ID:17078, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61709] Another function of GAM8678 is therefore inhibition of

LOC284752 (Accession XP_211628.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC284752.

[61710] LOC285138 (Accession XP_211778.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC285138 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC285138, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285138 BINDING SITE, designated SEQ ID:18958, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61711] Another function of GAM8678 is therefore inhibition of LOC285138 (Accession XP_211778.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285138.

[61712] LOC285205 (Accession XP_211805.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC285205 BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by LOC285205, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285205 BINDING SITE, designated SEQ ID:8095, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61713] Another function of GAM8678 is therefore inhibition of LOC285205 (Accession XP_211805.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285205.

[61714] LOC285717 (Accession XP_211991.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC285717 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285717, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285717 BINDING SITE, designated SEQ ID:1765, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also design-

nated SEQ ID:347.

[61715] Another function of GAM8678 is therefore inhibition of LOC285717 (Accession XP_211991.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285717.

[61716] LOC285731 (Accession XP_208347.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC285731 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285731, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285731 BINDING SITE, designated SEQ ID:942, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61717] Another function of GAM8678 is therefore inhibition of LOC285731 (Accession XP_208347.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285731.

[61718] LOC285760 (Accession XP_209750.1) is another

GAM8678 target gene, herein designated TARGET GENE. LOC285760 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285760, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285760 BINDING SITE, designated SEQ ID:2013, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61719] Another function of GAM8678 is therefore inhibition of LOC285760 (Accession XP_209750.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285760.

[61720] LOC285786 (Accession XP_208349.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC285786 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC285786, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285786 BINDING SITE, design-

nated SEQ ID:5902, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61721] Another function of GAM8678 is therefore inhibition of LOC285786 (Accession XP_208349.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC285786.

[61722] LOC285915 (Accession XP_209802.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC285915 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC285915, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC285915 BINDING SITE, designated SEQ ID:5143, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61723] Another function of GAM8678 is therefore inhibition of LOC285915 (Accession XP_209802.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC285915.

[61724] LOC286058 (Accession XP_212158.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC286058 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286058, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286058 BINDING SITE, designated SEQ ID:14887, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61725] Another function of GAM8678 is therefore inhibition of LOC286058 (Accession XP_212158.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286058.

[61726] LOC286208 (Accession XP_212230.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC286208 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC286208, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of

Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286208 BINDING SITE, designated SEQ ID:8543, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61727] Another function of GAM8678 is therefore inhibition of LOC286208 (Accession XP_212230.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286208.

[61728] LOC286370 (Accession XP_212295.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC286370 BINDING SITE is a target binding site found in the 3` untranslated region of mRNA encoded by LOC286370, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286370 BINDING SITE, designated SEQ ID:12258, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61729] Another function of GAM8678 is therefore inhibition of LOC286370 (Accession XP_212295.1) . Accordingly, utili-

ties of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286370.

[61730] LOC286371 (Accession XP_212291.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC286371 BINDING SITE1 and LOC286371 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC286371, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC286371 BINDING SITE1 and LOC286371 BINDING SITE2, designated SEQ ID:569 and SEQ ID:8936 respectively, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61731] Another function of GAM8678 is therefore inhibition of LOC286371 (Accession XP_212291.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC286371.

[61732] LOC338651 (Accession XP_294672.2) is another GAM8678 target gene, herein designated TARGET GENE. LOC338651 BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by LOC338651, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338651 BINDING SITE, designated SEQ ID:5468, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61733] Another function of GAM8678 is therefore inhibition of LOC338651 (Accession XP_294672.2) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC338651.

[61734] LOC338799 (Accession NP_848633.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC338799 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by LOC338799, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC338799 BINDING SITE, designated SEQ ID:2042, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA,

also designated SEQ ID:347.

[61735] Another function of GAM8678 is therefore inhibition of LOC338799 (Accession NP_848633.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC338799.

[61736] LOC339223 (Accession XP_290774.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC339223 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC339223, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339223 BINDING SITE, designated SEQ ID:5193, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61737] Another function of GAM8678 is therefore inhibition of LOC339223 (Accession XP_290774.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339223.

[61738] LOC339290 (Accession XP_294901.1) is another

GAM8678 target gene, herein designated TARGET GENE. LOC339290 BINDING SITE1 and LOC339290 BINDING SITE2 are target binding sites found in untranslated regions of mRNA encoded by LOC339290, corresponding to target binding sites such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC339290 BINDING SITE1 and LOC339290 BINDING SITE2, designated SEQ ID:8529 and SEQ ID:19490 respectively, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61739] Another function of GAM8678 is therefore inhibition of LOC339290 (Accession XP_294901.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339290.

[61740] LOC339556 (Accession XP_290951.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC339556 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC339556, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of LOC339556 BINDING SITE, designated SEQ ID:19228, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61741] Another function of GAM8678 is therefore inhibition of LOC339556 (Accession XP_290951.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC339556.

[61742] LOC340156 (Accession XP_291158.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC340156 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC340156, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340156 BINDING SITE, designated SEQ ID:5194, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61743] Another function of GAM8678 is therefore inhibition of LOC340156 (Accession XP_291158.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treat-

ment of diseases and clinical conditions associated with LOC340156.

[61744] LOC340158 (Accession XP_295175.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC340158 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC340158, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340158 BINDING SITE, designated SEQ ID:19672, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61745] Another function of GAM8678 is therefore inhibition of LOC340158 (Accession XP_295175.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340158.

[61746] LOC340276 (Accession XP_295197.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC340276 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC340276, corresponding to a target binding site such

as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC340276 BINDING SITE, designated SEQ ID:8760, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61747] Another function of GAM8678 is therefore inhibition of LOC340276 (Accession XP_295197.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC340276.

[61748] LOC343265 (Accession XP_291488.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC343265 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC343265, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC343265 BINDING SITE, designated SEQ ID:14724, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61749] Another function of GAM8678 is therefore inhibition of

LOC343265 (Accession XP_291488.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC343265.

[61750] LOC344865 (Accession XP_298324.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC344865 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC344865, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC344865 BINDING SITE, designated SEQ ID:727, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61751] Another function of GAM8678 is therefore inhibition of LOC344865 (Accession XP_298324.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC344865.

[61752] LOC348144 (Accession XP_300638.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC348144 BINDING SITE is a target binding site found in

the 3' untranslated region of mRNA encoded by LOC348144, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348144 BINDING SITE, designated SEQ ID:4130, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61753] Another function of GAM8678 is therefore inhibition of LOC348144 (Accession XP_300638.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348144.

[61754] LOC348166 (Accession XP_300293.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC348166 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC348166, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC348166 BINDING SITE, designated SEQ ID:14532, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also design-

nated SEQ ID:347.

[61755] Another function of GAM8678 is therefore inhibition of LOC348166 (Accession XP_300293.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC348166.

[61756] LOC349440 (Accession XP_300513.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC349440 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC349440, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC349440 BINDING SITE, designated SEQ ID:14456, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61757] Another function of GAM8678 is therefore inhibition of LOC349440 (Accession XP_300513.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC349440.

[61758] LOC351012 (Accession XP_304617.1) is another

GAM8678 target gene, herein designated TARGET GENE. LOC351012 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC351012, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC351012 BINDING SITE, designated SEQ ID:8029, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61759] Another function of GAM8678 is therefore inhibition of LOC351012 (Accession XP_304617.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC351012.

[61760] LOC351833 (Accession XP_305187.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC351833 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC351833, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC351833 BINDING SITE, design-

nated SEQ ID:18089, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61761] Another function of GAM8678 is therefore inhibition of LOC351833 (Accession XP_305187.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC351833.

[61762] LOC352905 (Accession XP_302020.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC352905 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by LOC352905, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC352905 BINDING SITE, designated SEQ ID:18393, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61763] Another function of GAM8678 is therefore inhibition of LOC352905 (Accession XP_302020.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with

LOC352905.

[61764] LOC51122 (Accession NP_057178.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC51122 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC51122, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC51122 BINDING SITE, designated SEQ ID:14155, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61765] Another function of GAM8678 is therefore inhibition of LOC51122 (Accession NP_057178.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC51122.

[61766] LOC51236 (Accession NP_057542.2) is another GAM8678 target gene, herein designated TARGET GENE. LOC51236 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC51236, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of

LOC51236 BINDING SITE, designated SEQ ID:17817, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61767] Another function of GAM8678 is therefore inhibition of LOC51236 (Accession NP_057542.2) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC51236.

[61768] LOC90355 (Accession NP_149988.1) is another GAM8678 target gene, herein designated TARGET GENE. LOC90355 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by LOC90355, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC90355 BINDING SITE, designated SEQ ID:8431, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61769] Another function of GAM8678 is therefore inhibition of LOC90355 (Accession NP_149988.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC90355.

[61770] LOC93320 (Accession XP_050534.6) is another GAM8678 target gene, herein designated TARGET GENE. LOC93320 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LOC93320, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LOC93320 BINDING SITE, designated SEQ ID:2120, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61771] Another function of GAM8678 is therefore inhibition of LOC93320 (Accession XP_050534.6) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LOC93320.

[61772] LYG2 (Accession NP_783862.2) is another GAM8678 target gene, herein designated TARGET GENE. LYG2 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by LYG2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of LYG2 BINDING SITE, designated SEQ ID:1943, to the nucleotide sequence

of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61773] Another function of GAM8678 is therefore inhibition of LYG2 (Accession NP_783862.2) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with LYG2.

[61774] Mitogen-activated protein kinase 4 (MAPK4, Accession NP_002738.1) is another GAM8678 target gene, herein designated TARGET GENE. MAPK4 BINDING SITE is a target binding site found in the 5` untranslated region of mRNA encoded by MAPK4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MAPK4 BINDING SITE, designated SEQ ID:18963, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61775] Another function of GAM8678 is therefore inhibition of Mitogen-activated protein kinase 4 (MAPK4, Accession NP_002738.1), a gene which phosphorylates microtubule-associated protein- 2 may promote entry into the cell cycle. Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical condi-

tions associated with MAPK4.

[61776] The function of MAPK4 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM179.1.MGC14141 (Accession NP_116317.1) is another GAM8678 target gene, herein designated TARGET GENE. MGC14141 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC14141, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC14141 BINDING SITE, designated SEQ ID:13489, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61777] Another function of GAM8678 is therefore inhibition of MGC14141 (Accession NP_116317.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC14141.

[61778] MGC4238 (Accession NP_115708.1) is another GAM8678 target gene, herein designated TARGET GENE. MGC4238 BINDING SITE is a target binding site found in the 3' un-

translated region of mRNA encoded by MGC4238, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC4238 BINDING SITE, designated SEQ ID:14031, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61779] Another function of GAM8678 is therefore inhibition of MGC4238 (Accession NP_115708.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC4238.

[61780] MGC51025 (Accession NP_848666.1) is another GAM8678 target gene, herein designated TARGET GENE. MGC51025 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MGC51025, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC51025 BINDING SITE, designated SEQ ID:3328, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61781] Another function of GAM8678 is therefore inhibition of

MGC51025 (Accession NP_848666.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC51025.

[61782] MGC8902 (Accession NP_775909.1) is another GAM8678 target gene, herein designated TARGET GENE. MGC8902 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MGC8902, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MGC8902 BINDING SITE, designated SEQ ID:19518, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61783] Another function of GAM8678 is therefore inhibition of MGC8902 (Accession NP_775909.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MGC8902.

[61784] MSCP (Accession NP_061049.2) is another GAM8678 target gene, herein designated TARGET GENE. MSCP BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by MSCP,

corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MSCP BINDING SITE, designated SEQ ID:16919, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61785] Another function of GAM8678 is therefore inhibition of MSCP (Accession NP_061049.2) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MSCP.

[61786] Musashi homolog 1 (drosophila) (MSI1, Accession NP_002433.1) is another GAM8678 target gene, herein designated TARGET GENE. MSI1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by MSI1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MSI1 BINDING SITE, designated SEQ ID:6193, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61787] Another function of GAM8678 is therefore inhibition of Musashi homolog 1 (drosophila) (MSI1, Accession

NP_002433.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MSI1.

[61788] Mature t-cell proliferation 1 (MTCP1, Accession NP_055036.1) is another GAM8678 target gene, herein designated TARGET GENE. MTCP1 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by MTCP1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of MTCP1 BINDING SITE, designated SEQ ID:1715, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61789] Another function of GAM8678 is therefore inhibition of Mature t-cell proliferation 1 (MTCP1, Accession NP_055036.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with MTCP1.

[61790] NaGLT1 (Accession NP_699200.1) is another GAM8678 target gene, herein designated TARGET GENE. NaGLT1 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by NaGLT1, corre-

sponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NaGLT1 BINDING SITE, designated SEQ ID:2522, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61791] Another function of GAM8678 is therefore inhibition of NaGLT1 (Accession NP_699200.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NaGLT1.

[61792] Neuron navigator 2 (NAV2, Accession NP_660093.1) is another GAM8678 target gene, herein designated TARGET GENE. NAV2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by NAV2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NAV2 BINDING SITE, designated SEQ ID:18122, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61793] Another function of GAM8678 is therefore inhibition of

Neuron navigator 2 (NAV2, Accession NP_660093.1), a gene which plays an important role in neuronal development, including neurite outgrowth. Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NAV2.

[61794] The function of NAV2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM1510.1. Neuron navigator 2 (NAV2, Accession NP_060632.2) is another GAM8678 target gene, herein designated TARGET GENE. NAV2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by NAV2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NAV2 BINDING SITE, designated SEQ ID:18122, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61795] Another function of GAM8678 is therefore inhibition of Neuron navigator 2 (NAV2, Accession NP_060632.2), a gene which plays an important role in neuronal development, including neurite outgrowth. Accordingly, utilities

of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NAV2.

[61796] The function of NAV2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM1510.1.NECAB2 (Accession NP_061938.1) is another GAM8678 target gene, herein designated TARGET GENE. NECAB2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by NECAB2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NECAB2 BINDING SITE, designated SEQ ID:5863, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61797] Another function of GAM8678 is therefore inhibition of NECAB2 (Accession NP_061938.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NECAB2.

[61798] Nuclear receptor subfamily 4, group a, member 3 (NR4A3, Accession NP_008912.2) is another GAM8678 target gene,

herein designated TARGET GENE. NR4A3 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by NR4A3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NR4A3 BINDING SITE, designated SEQ ID:10007, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61799] Another function of GAM8678 is therefore inhibition of Nuclear receptor subfamily 4, group a, member 3 (NR4A3, Accession NP_008912.2) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NR4A3.

[61800] Nuclear receptor subfamily 4, group a, member 3 (NR4A3, Accession NP_775290.1) is another GAM8678 target gene, herein designated TARGET GENE. NR4A3 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by NR4A3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NR4A3 BINDING SITE, designated SEQ ID:10007, to the

nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61801] Another function of GAM8678 is therefore inhibition of Nuclear receptor subfamily 4, group a, member 3 (NR4A3, Accession NP_775290.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NR4A3.

[61802] Nuclear receptor subfamily 4, group a, member 3 (NR4A3, Accession NP_775292.1) is another GAM8678 target gene, herein designated TARGET GENE. NR4A3 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by NR4A3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NR4A3 BINDING SITE, designated SEQ ID:10007, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61803] Another function of GAM8678 is therefore inhibition of Nuclear receptor subfamily 4, group a, member 3 (NR4A3, Accession NP_775292.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NR4A3.

[61804] Nudix (nucleoside diphosphate linked moiety x)-type motif 9 (NUDT9, Accession NP_076952.1) is another GAM8678 target gene, herein designated TARGET GENE. NUDT9 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by NUDT9, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of NUDT9 BINDING SITE, designated SEQ ID:4160, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61805] Another function of GAM8678 is therefore inhibition of Nudix (nucleoside diphosphate linked moiety x)-type motif 9 (NUDT9, Accession NP_076952.1). Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with NUDT9.

[61806] Oculocutaneous albinism ii (pink-eye dilution homolog, mouse) (OCA2, Accession NP_000266.1) is another GAM8678 target gene, herein designated TARGET GENE. OCA2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by OCA2, corresponding to a target binding site such as BINDING SITE I,

BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of OCA2 BINDING SITE, designated SEQ ID:19737, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61807] Another function of GAM8678 is therefore inhibition of Oculocutaneous albinism ii (pink-eye dilution homolog, mouse) (OCA2, Accession NP_000266.1), a gene which is believed to be an integral membrane protein involved in small molecule transport, specifically tyrosine – a precursor of melanin. and therefore is associated with Type 2 oculocutaneous albinism. Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of Type 2 oculocutaneous albinism., and of other diseases and clinical conditions associated with OCA2.

[61808] The function of OCA2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM259.2.Oxysterol binding protein-like 2 (OSBPL2, Accession NP_653081.1) is another GAM8678 target gene, herein designated TARGET GENE. OSBPL2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by OSBPL2, cor-

responding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of OSBPL2 BINDING SITE, designated SEQ ID:2305, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61809] Another function of GAM8678 is therefore inhibition of Oxysterol binding protein-like 2 (OSBPL2, Accession NP_653081.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with OSBPL2.

[61810] Oxysterol binding protein-like 2 (OSBPL2, Accession NP_055650.1) is another GAM8678 target gene, herein designated TARGET GENE. OSBPL2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by OSBPL2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of OSBPL2 BINDING SITE, designated SEQ ID:2305, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61811] Another function of GAM8678 is therefore inhibition of

Oxysterol binding protein-like 2 (OSBPL2, Accession NP_055650.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with OSBPL2.

[61812] PdZ and lim domain 2 (mystique) (PDLIM2, Accession NP_789847.1) is another GAM8678 target gene, herein designated TARGET GENE. PDLIM2 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PDLIM2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PDLIM2 BINDING SITE, designated SEQ ID:12274, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61813] Another function of GAM8678 is therefore inhibition of PdZ and lim domain 2 (mystique) (PDLIM2, Accession NP_789847.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PDLIM2.

[61814] Pellino homolog 2 (drosophila) (PELI2, Accession NP_067078.1) is another GAM8678 target gene, herein designated TARGET GENE. PELI2 BINDING SITE is a target

binding site found in the 3' untranslated region of mRNA encoded by PELI2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PELI2 BINDING SITE, designated SEQ ID:5142, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61815] Another function of GAM8678 is therefore inhibition of Pellino homolog 2 (drosophila) (PELI2, Accession NP_067078.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PELI2.

[61816] PHGDHL1 (Accession NP_808882.1) is another GAM8678 target gene, herein designated TARGET GENE. PHGDHL1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PHGDHL1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PHGDHL1 BINDING SITE, designated SEQ ID:2130, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61817] Another function of GAM8678 is therefore inhibition of PHGDHL1 (Accession NP_808882.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PHGDHL1.

[61818] Polycystic kidney and hepatic disease 1 (autosomal recessive) (PKHD1, Accession NP_619639.2) is another GAM8678 target gene, herein designated TARGET GENE. PKHD1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PKHD1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PKHD1 BINDING SITE, designated SEQ ID:4107, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61819] Another function of GAM8678 is therefore inhibition of Polycystic kidney and hepatic disease 1 (autosomal recessive) (PKHD1, Accession NP_619639.2) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PKHD1.

[61820] Plakophilin 2 (PKP2, Accession NP_004563.1) is another GAM8678 target gene, herein designated TARGET GENE. PKP2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PKP2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PKP2 BINDING SITE, designated SEQ ID:6155, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61821] Another function of GAM8678 is therefore inhibition of Plakophilin 2 (PKP2, Accession NP_004563.1), a gene which may play a role in junctional plaques. Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PKP2.

[61822] The function of PKP2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM93.1. Polymyositis/scleroderma autoantigen 2, 100kda (PMSCL2, Accession NP_002676.1) is another GAM8678 target gene, herein designated TARGET GENE. PMSCL2 BINDING SITE is a target binding site found in the

3` untranslated region of mRNA encoded by PMSCL2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PMSCL2 BINDING SITE, designated SEQ ID:8871, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61823] Another function of GAM8678 is therefore inhibition of Polymyositis/scleroderma autoantigen 2, 100kda (PMSCL2, Accession NP_002676.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PM-SCL2.

[61824] Peanut-like 2 (drosophila) (PNUTL2, Accession NP_536341.1) is another GAM8678 target gene, herein designated TARGET GENE. PNUTL2 BINDING SITE is a target binding site found in the 5` untranslated region of multiple transcripts of mRNA encoded by PNUTL2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PNUTL2 BINDING SITE, designated SEQ ID:15639, to the nucleotide sequence of GAM8678 RNA, herein designated

GAM RNA, also designated SEQ ID:347.

[61825] Another function of GAM8678 is therefore inhibition of Peanut-like 2 (drosophila) (PNUTL2, Accession NP_536341.1), a gene which is involved in cytokinesis. Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PNUTL2.

[61826] The function of PNUTL2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM223.1. Peanut-like 2 (drosophila) (PNUTL2, Accession NP_536340.1) is another GAM8678 target gene, herein designated TARGET GENE. PNUTL2 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by PNUTL2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PNUTL2 BINDING SITE, designated SEQ ID:15639, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61827] Another function of GAM8678 is therefore inhibition of Peanut-like 2 (drosophila) (PNUTL2, Accession

NP_536340.1), a gene which is involved in cytokinesis. Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PNUTL2.

[61828] The function of PNUTL2 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM223.1. Protein phosphatase 2, regulatory subunit b (b56), gamma isoform (PPP2R5C, Accession NP_848701.1) is another GAM8678 target gene, herein designated TARGET GENE. PPP2R5C BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PPP2R5C, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PPP2R5C BINDING SITE, designated SEQ ID:2895, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61829] Another function of GAM8678 is therefore inhibition of Protein phosphatase 2, regulatory subunit b (b56), gamma isoform (PPP2R5C, Accession NP_848701.1), a gene which is a regulatory subunit of protein phosphatase 2A. Ac-

cordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PPP2R5C.

[61830] The function of PPP2R5C and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM99.1. Protein phosphatase 2, regulatory subunit b (b56), gamma isoform (PPP2R5C, Accession NP_002710.2) is another GAM8678 target gene, herein designated TARGET GENE. PPP2R5C BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by PPP2R5C, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PPP2R5C BINDING SITE, designated SEQ ID:2895, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61831] Another function of GAM8678 is therefore inhibition of Protein phosphatase 2, regulatory subunit b (b56), gamma isoform (PPP2R5C, Accession NP_002710.2), a gene which is a regulatory subunit of protein phosphatase 2A. Accordingly, utilities of GAM8678 include diagnosis, preven-

tion and treatment of diseases and clinical conditions associated with PPP2R5C.

[61832] The function of PPP2R5C and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM99.1.Prp4 pre-mrna processing factor 4 homolog (yeast) (PRPF4, Accession NP_004688.2) is another GAM8678 target gene, herein designated TARGET GENE. PRPF4 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PRPF4, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PRPF4 BINDING SITE, designated SEQ ID:9758, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61833] Another function of GAM8678 is therefore inhibition of Prp4 pre-mrna processing factor 4 homolog (yeast) (PRPF4, Accession NP_004688.2) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PRPF4.

[61834] Protein tyrosine phosphatase, non-receptor type 1 (PTPN1, Accession NP_002818.1) is another GAM8678

target gene, herein designated TARGET GENE. PTPN1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by PTPN1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PTPN1 BINDING SITE, designated SEQ ID:8916, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61835] Another function of GAM8678 is therefore inhibition of Protein tyrosine phosphatase, non-receptor type 1 (PTPN1, Accession NP_002818.1), a gene which is a non-receptor type 1 protein tyrosine phosphatase and inhibits insulin signaling. Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PTPN1.

[61836] The function of PTPN1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM71.1.Peptide yy, 2 (seminalplasmin) (PYY2, Accession NP_066579.1) is another GAM8678 target gene, herein designated TARGET GENE. PYY2 BINDING SITE is a target binding site found in the 3' untranslated region of

mRNA encoded by PYY2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of PYY2 BINDING SITE, designated SEQ ID:18282, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61837] Another function of GAM8678 is therefore inhibition of Peptide yy, 2 (seminalplasmin) (PYY2, Accession NP_066579.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with PYY2.

[61838] Rna binding motif protein 15 (RBM15, Accession NP_073605.3) is another GAM8678 target gene, herein designated TARGET GENE. RBM15 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by RBM15, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RBM15 BINDING SITE, designated SEQ ID:16706, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61839] Another function of GAM8678 is therefore inhibition of Rna binding motif protein 15 (RBM15, Accession NP_073605.3), a gene which is a candidate oncoprotein and therefore may be associated with Acute megakaryoblastic leukemia (amkl). Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of Acute megakaryoblastic leukemia (amkl), and of other diseases and clinical conditions associated with RBM15.

[61840] The function of RBM15 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM5039.2.RDH11 (Accession NP_057110.2) is another GAM8678 target gene, herein designated TARGET GENE. RDH11 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RDH11, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RDH11 BINDING SITE, designated SEQ ID:12781, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61841] Another function of GAM8678 is therefore inhibition of

RDH11 (Accession NP_057110.2) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RDH11.

[61842] RNF144 (Accession NP_055561.1) is another GAM8678 target gene, herein designated TARGET GENE. RNF144 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RNF144, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RNF144 BINDING SITE, designated SEQ ID:9320, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61843] Another function of GAM8678 is therefore inhibition of RNF144 (Accession NP_055561.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RNF144.

[61844] Retinoid x receptor, alpha (RXRA, Accession NP_002948.1) is another GAM8678 target gene, herein designated TARGET GENE. RXRA BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by RXRA, corresponding to a target binding site such as

BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of RXRA BINDING SITE, designated SEQ ID:19924, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61845] Another function of GAM8678 is therefore inhibition of Retinoid x receptor, alpha (RXRA, Accession NP_002948.1), a gene which activates genes required for vitamin A metabolism, binds 9- cis retinoic acid. Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with RXRA.

[61846] The function of RXRA and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM146.1.Splicing factor, arginine/serine-rich 2, interacting protein (SFRS2IP, Accession NP_004710.1) is another GAM8678 target gene, herein designated TARGET GENE. SFRS2IP BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by SFRS2IP, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nu-

cleotide sequences of SFRS2IP BINDING SITE, designated SEQ ID:4478, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61847] Another function of GAM8678 is therefore inhibition of Splicing factor, arginine/serine-rich 2, interacting protein (SFRS2IP, Accession NP_004710.1), a gene which plays an essential role in pre-mRNA splicing. Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SFRS2IP.

[61848] The function of SFRS2IP and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM44.1. Solute carrier family 4, anion exchanger, member 3 (SLC4A3, Accession NP_005061.1) is another GAM8678 target gene, herein designated TARGET GENE. SLC4A3 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SLC4A3, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SLC4A3 BINDING SITE, designated SEQ ID:10313, to the

nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61849] Another function of GAM8678 is therefore inhibition of Solute carrier family 4, anion exchanger, member 3 (SLC4A3, Accession NP_005061.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SLC4A3.

[61850] SMBP (Accession NP_064508.1) is another GAM8678 target gene, herein designated TARGET GENE. SMBP BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SMBP, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SMBP BINDING SITE, designated SEQ ID:2093, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61851] Another function of GAM8678 is therefore inhibition of SMBP (Accession NP_064508.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SMBP.

[61852] Small nuclear ribonucleoprotein polypeptide n (SNRPN,

Accession NP_073718.1) is another GAM8678 target gene, herein designated TARGET GENE. SNRPN BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by SNRPN, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SNRPN BINDING SITE, designated SEQ ID:15260, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61853] Another function of GAM8678 is therefore inhibition of Small nuclear ribonucleoprotein polypeptide n (SNRPN, Accession NP_073718.1), a gene which may be involved in tissue-specific alternative RNA processing events and therefore may be associated with Prader-willi syndrome, angelman syndrome. Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of Prader-willi syndrome, angelman syndrome, and of other diseases and clinical conditions associated with SNRPN.

[61854] The function of SNRPN and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM507.1. Small nuclear ribonucleoprotein polypeptide

n (SNRPN, Accession NP_073719.1) is another GAM8678 target gene, herein designated TARGET GENE. SNRPN BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by SNRPN, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SNRPN BINDING SITE, designated SEQ ID:15260, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61855] Another function of GAM8678 is therefore inhibition of Small nuclear ribonucleoprotein polypeptide n (SNRPN, Accession NP_073719.1), a gene which may be involved in tissue- specific alternative RNA processing events and therefore may be associated with Prader- willi syndrome, angelman syndrome. Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of Prader- willi syndrome, angelman syndrome, and of other diseases and clinical conditions associated with SNRPN.

[61856] The function of SNRPN and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM507.1.Serine/arginine repetitive matrix 1 (SRRM1, Accession NP_005830.1) is another GAM8678 target gene, herein designated TARGET GENE. SRRM1 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by SRRM1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of SRRM1 BINDING SITE, designated SEQ ID:9316, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61857] Another function of GAM8678 is therefore inhibition of Serine/arginine repetitive matrix 1 (SRRM1, Accession NP_005830.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with SRRM1.

[61858] ST18 (Accession NP_055497.1) is another GAM8678 target gene, herein designated TARGET GENE. ST18 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by ST18, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ST18 BINDING

SITE, designated SEQ ID:7850, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

- [61859] Another function of GAM8678 is therefore inhibition of ST18 (Accession NP_055497.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ST18.
- [61860] Staufen, rna binding protein (drosophila) (STAU, Accession NP_059346.1) is another GAM8678 target gene, herein designated TARGET GENE. STAU BINDING SITE is a target binding site found in the 5` untranslated region of multiple transcripts of mRNA encoded by STAU, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of STAU BINDING SITE, designated SEQ ID:13032, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.
- [61861] Another function of GAM8678 is therefore inhibition of Staufen, rna binding protein (drosophila) (STAU, Accession NP_059346.1), a gene which may play a role in specific positioning of mrnas at given sites in the cell and in stimulating their translation at the site. Accordingly, utilities of

GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with STAU.

[61862] The function of STAU and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM37.1.Staufen, rna binding protein (drosophila) (STAU, Accession NP_059347.1) is another GAM8678 target gene, herein designated TARGET GENE. STAU BINDING SITE is a target binding site found in the 5` untranslated region of multiple transcripts of mRNA encoded by STAU, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of STAU BINDING SITE, designated SEQ ID:13032, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61863] Another function of GAM8678 is therefore inhibition of Staufen, rna binding protein (drosophila) (STAU, Accession NP_059347.1), a gene which may play a role in specific positioning of mrnas at given sites in the cell and in stimulating their translation at the site. Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with STAU.

[61864] The function of STAU and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM37.1. Staufen, rna binding protein (drosophila) (STAU, Accession NP_004593.1) is another GAM8678 target gene, herein designated TARGET GENE. STAU BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by STAU, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of STAU BINDING SITE, designated SEQ ID:13032, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61865] Another function of GAM8678 is therefore inhibition of Staufen, rna binding protein (drosophila) (STAU, Accession NP_004593.1), a gene which may play a role in specific positioning of mrnas at given sites in the cell and in stimulating their translation at the site. Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with STAU.

[61866] The function of STAU and its association with various diseases and clinical conditions, has been established by

previous studies, as described hereinabove with reference to GAM37.1.STN2 (Accession NP_149095.2) is another GAM8678 target gene, herein designated TARGET GENE. STN2 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by STN2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of STN2 BINDING SITE, designated SEQ ID:7040, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61867] Another function of GAM8678 is therefore inhibition of STN2 (Accession NP_149095.2) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with STN2.

[61868] T1A-2 (Accession NP_006465.1) is another GAM8678 target gene, herein designated TARGET GENE. T1A-2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by T1A-2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of T1A-2 BINDING SITE, designated SEQ ID:7465, to the nucleotide

sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61869] Another function of GAM8678 is therefore inhibition of T1A-2 (Accession NP_006465.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with T1A-2.

[61870] T-cell leukemia/lymphoma 6 (TCL6, Accession NP_065578.2) is another GAM8678 target gene, herein designated TARGET GENE. TCL6 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by TCL6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TCL6 BINDING SITE, designated SEQ ID:19762, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61871] Another function of GAM8678 is therefore inhibition of T-cell leukemia/lymphoma 6 (TCL6, Accession NP_065578.2) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TCL6.

[61872] T-cell leukemia/lymphoma 6 (TCL6, Accession

NP_065579.2) is another GAM8678 target gene, herein designated TARGET GENE. TCL6 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by TCL6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TCL6 BINDING SITE, designated SEQ ID:19762, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61873] Another function of GAM8678 is therefore inhibition of T-cell leukemia/lymphoma 6 (TCL6, Accession NP_065579.2) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TCL6.

[61874] TEM6 (Accession NP_073585.6) is another GAM8678 target gene, herein designated TARGET GENE. TEM6 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TEM6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TEM6 BINDING SITE, designated SEQ ID:3134, to the nucleotide se-

quence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61875] Another function of GAM8678 is therefore inhibition of TEM6 (Accession NP_073585.6), a gene which displays elevated expression during tumor angiogenesis. Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TEM6.

[61876] The function of TEM6 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM401.1.Transmembrane protein 2 (TMEM2, Accession NP_037522.1) is another GAM8678 target gene, herein designated TARGET GENE. TMEM2 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by TMEM2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TMEM2 BINDING SITE, designated SEQ ID:15174, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61877] Another function of GAM8678 is therefore inhibition of

Transmembrane protein 2 (TMEM2, Accession NP_037522.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TMEM2.

[61878] Thymopoietin (TMPO, Accession NP_003267.1) is another GAM8678 target gene, herein designated TARGET GENE. TMPO BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by TMPO, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TMPO BINDING SITE, designated SEQ ID:17228, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61879] Another function of GAM8678 is therefore inhibition of Thymopoietin (TMPO, Accession NP_003267.1), a gene which plays important roles in T- cell development and function. Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TMPO.

[61880] The function of TMPO and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM884.1.TMPRSS6 (Accession NP_705837.1) is another GAM8678 target gene, herein designated TARGET GENE. TMPRSS6 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by TMPRSS6, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TMPRSS6 BINDING SITE, designated SEQ ID:7953, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61881] Another function of GAM8678 is therefore inhibition of TMPRSS6 (Accession NP_705837.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TMPRSS6.

[61882] Tumor necrosis factor receptor superfamily, member 21 (TNFRSF21, Accession NP_055267.1) is another GAM8678 target gene, herein designated TARGET GENE. TNFRSF21 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TNFRSF21, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illus-

trates the complementarity of the nucleotide sequences of TNFRSF21 BINDING SITE, designated SEQ ID:13399, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61883] Another function of GAM8678 is therefore inhibition of Tumor necrosis factor receptor superfamily, member 21 (TNFRSF21, Accession NP_055267.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TNFRSF21.

[61884] TP53I5 (Accession XP_290532.2) is another GAM8678 target gene, herein designated TARGET GENE. TP53I5 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by TP53I5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TP53I5 BINDING SITE, designated SEQ ID:13005, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61885] Another function of GAM8678 is therefore inhibition of TP53I5 (Accession XP_290532.2) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of

diseases and clinical conditions associated with TP5315.

[61886] TREM5 (Accession NP_777552.1) is another GAM8678 target gene, herein designated TARGET GENE. TREM5 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TREM5, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TREM5 BINDING SITE, designated SEQ ID:16803, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61887] Another function of GAM8678 is therefore inhibition of TREM5 (Accession NP_777552.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TREM5.

[61888] TRIM (Accession NP_057472.1) is another GAM8678 target gene, herein designated TARGET GENE. TRIM BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TRIM, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TRIM BINDING SITE, designated SEQ ID:12763, to the nucleotide se-

quence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

- [61889] Another function of GAM8678 is therefore inhibition of TRIM (Accession NP_057472.1), a gene which plays a role in recruiting signaling proteins to the plasma membrane upon T- cell receptor (TCR) complex activation in T cells. Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TRIM.
- [61890] The function of TRIM and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM519.1. Tripartite motif-containing 9 (TRIM9, Accession NP_443210.1) is another GAM8678 target gene, herein designated TARGET GENE. TRIM9 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by TRIM9, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TRIM9 BINDING SITE, designated SEQ ID:5946, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61891] Another function of GAM8678 is therefore inhibition of Tripartite motif-containing 9 (TRIM9, Accession NP_443210.1), a gene which may function as a positive regulator for mannosylphosphate transferase and is required to mediate mannosylphosphate transfer in both the core and outer chain portions of n-linked oligosaccharides. Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TRIM9.

[61892] The function of TRIM9 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference to GAM72.1.TU12B1-TY (Accession NP_057659.1) is another GAM8678 target gene, herein designated TARGET GENE. TU12B1-TY BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by TU12B1-TY, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of TU12B1-TY BINDING SITE, designated SEQ ID:16134, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61893] Another function of GAM8678 is therefore inhibition of TU12B1-TY (Accession NP_057659.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with TU12B1-TY.

[61894] Uridine phosphorylase (UP, Accession NP_853628.1) is another GAM8678 target gene, herein designated TARGET GENE. UP BINDING SITE is a target binding site found in the 5` untranslated region of multiple transcripts of mRNA encoded by UP, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of UP BINDING SITE, designated SEQ ID:18427, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61895] Another function of GAM8678 is therefore inhibition of Uridine phosphorylase (UP, Accession NP_853628.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with UP.

[61896] Uridine phosphorylase (UP, Accession NP_003355.1) is another GAM8678 target gene, herein designated TARGET

GENE. UP BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by UP, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of UP BINDING SITE, designated SEQ ID:18427, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61897] Another function of GAM8678 is therefore inhibition of Uridine phosphorylase (UP, Accession NP_003355.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with UP.

[61898] Ubiquitin specific protease 24 (USP24, Accession XP_165973.3) is another GAM8678 target gene, herein designated TARGET GENE. USP24 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by USP24, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of USP24 BINDING SITE, designated SEQ ID:4851, to the nucleotide sequence of GAM8678

RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61899] Another function of GAM8678 is therefore inhibition of Ubiquitin specific protease 24 (USP24, Accession XP_165973.3) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with USP24.

[61900] Williams beuren syndrome chromosome region 18 (WBSCR18, Accession NP_115693.2) is another GAM8678 target gene, herein designated TARGET GENE. WBSCR18 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by WBSCR18, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of WBSCR18 BINDING SITE, designated SEQ ID:18022, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61901] Another function of GAM8678 is therefore inhibition of Williams beuren syndrome chromosome region 18 (WBSCR18, Accession NP_115693.2) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with WB-

SCR18.

[61902] Wolf-hirschhorn syndrome candidate 1 (WHSC1, Accession NP_579877.1) is another GAM8678 target gene, herein designated TARGET GENE. WHSC1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by WHSC1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of WHSC1 BINDING SITE, designated SEQ ID:2577, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61903] Another function of GAM8678 is therefore inhibition of Wolf-hirschhorn syndrome candidate 1 (WHSC1, Accession NP_579877.1), a gene which binds covalently to and repairs g/t mismatches. and therefore may be associated with Wolf-hirschhorn syndrome. Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of Wolf-hirschhorn syndrome, and of other diseases and clinical conditions associated with WHSC1.

[61904] The function of WHSC1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM30.1.Wolf-hirschhorn syndrome candidate 1 (WHSC1, Accession NP_579888.1) is another GAM8678 target gene, herein designated TARGET GENE. WHSC1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by WHSC1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of WHSC1 BINDING SITE, designated SEQ ID:2577, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61905] Another function of GAM8678 is therefore inhibition of Wolf-hirschhorn syndrome candidate 1 (WHSC1, Accession NP_579888.1), a gene which binds covalently to and repairs g/t mismatches. and therefore may be associated with Wolf-hirschhorn syndrome. Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of Wolf-hirschhorn syndrome, and of other diseases and clinical conditions associated with WHSC1.

[61906] The function of WHSC1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM30.1.Wolf-hirschhorn syndrome candidate 1 (WHSC1, Accession NP_055734.1) is another GAM8678 target gene, herein designated TARGET GENE. WHSC1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by WHSC1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of WHSC1 BINDING SITE, designated SEQ ID:2577, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61907] Another function of GAM8678 is therefore inhibition of Wolf-hirschhorn syndrome candidate 1 (WHSC1, Accession NP_055734.1), a gene which binds covalently to and repairs g/t mismatches. and therefore may be associated with Wolf- hirschhorn syndrome. Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of Wolf- hirschhorn syndrome, and of other diseases and clinical conditions associated with WHSC1.

[61908] The function of WHSC1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM30.1.Wolf-hirschhorn syndrome candidate 1 (WHSC1, Accession NP_579890.1) is another GAM8678 target gene, herein designated TARGET GENE. WHSC1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by WHSC1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of WHSC1 BINDING SITE, designated SEQ ID:2577, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61909] Another function of GAM8678 is therefore inhibition of Wolf-hirschhorn syndrome candidate 1 (WHSC1, Accession NP_579890.1), a gene which binds covalently to and repairs g/t mismatches. and therefore may be associated with Wolf-hirschhorn syndrome. Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of Wolf-hirschhorn syndrome, and of other diseases and clinical conditions associated with WHSC1.

[61910] The function of WHSC1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM30.1.Wolf-hirschhorn syndrome candidate 1 (WHSC1, Accession NP_579878.1) is another GAM8678 target gene, herein designated TARGET GENE. WHSC1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by WHSC1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of WHSC1 BINDING SITE, designated SEQ ID:2577, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61911] Another function of GAM8678 is therefore inhibition of Wolf-hirschhorn syndrome candidate 1 (WHSC1, Accession NP_579878.1), a gene which binds covalently to and repairs g/t mismatches. and therefore may be associated with Wolf-hirschhorn syndrome. Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of Wolf-hirschhorn syndrome, and of other diseases and clinical conditions associated with WHSC1.

[61912] The function of WHSC1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM30.1.Wolf-hirschhorn syndrome candidate 1 (WHSC1, Accession NP_579879.1) is another GAM8678 target gene, herein designated TARGET GENE. WHSC1 BINDING SITE is a target binding site found in the 3' untranslated region of multiple transcripts of mRNA encoded by WHSC1, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of WHSC1 BINDING SITE, designated SEQ ID:2577, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61913] Another function of GAM8678 is therefore inhibition of Wolf-hirschhorn syndrome candidate 1 (WHSC1, Accession NP_579879.1), a gene which binds covalently to and repairs g/t mismatches. and therefore may be associated with Wolf-hirschhorn syndrome. Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of Wolf-hirschhorn syndrome, and of other diseases and clinical conditions associated with WHSC1.

[61914] The function of WHSC1 and its association with various diseases and clinical conditions, has been established by previous studies, as described hereinabove with reference

to GAM30.1.WSB2 (Accession NP_061109.1) is another GAM8678 target gene, herein designated TARGET GENE. WSB2 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by WSB2, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of WSB2 BINDING SITE, designated SEQ ID:7154, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61915] Another function of GAM8678 is therefore inhibition of WSB2 (Accession NP_061109.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with WSB2.

[61916] ZFP106 (Accession NP_071918.1) is another GAM8678 target gene, herein designated TARGET GENE. ZFP106 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZFP106, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZFP106 BINDING SITE, designated SEQ ID:19973, to the nucleotide sequence of GAM8678 RNA, herein designated

GAM RNA, also designated SEQ ID:347.

[61917] Another function of GAM8678 is therefore inhibition of ZFP106 (Accession NP_071918.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZFP106.

[61918] Zinc finger protein 211 (ZNF211, Accession NP_006376.1) is another GAM8678 target gene, herein designated TARGET GENE. ZNF211 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by ZNF211, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF211 BINDING SITE, designated SEQ ID:19228, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61919] Another function of GAM8678 is therefore inhibition of Zinc finger protein 211 (ZNF211, Accession NP_006376.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF211.

[61920] Zinc finger protein 211 (ZNF211, Accession XP_290823.1) is another GAM8678 target gene, herein designated TAR-

GET GENE. ZNF211 BINDING SITE is a target binding site found in the 5' untranslated region of multiple transcripts of mRNA encoded by ZNF211, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF211 BINDING SITE, designated SEQ ID:19228, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61921] Another function of GAM8678 is therefore inhibition of Zinc finger protein 211 (ZNF211, Accession XP_290823.1). Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF211.

[61922] Zinc finger protein 79 (pt7) (ZNF79, Accession NP_009066.1) is another GAM8678 target gene, herein designated TARGET GENE. ZNF79 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by ZNF79, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF79 BINDING SITE, designated SEQ ID:9053, to the nucleotide sequence of GAM8678

RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61923] Another function of GAM8678 is therefore inhibition of Zinc finger protein 79 (pt7) (ZNF79, Accession NP_009066.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF79.

[61924] Zinc finger protein 84 (hpf2) (ZNF84, Accession NP_003419.1) is another GAM8678 target gene, herein designated TARGET GENE. ZNF84 BINDING SITE is a target binding site found in the 5' untranslated region of mRNA encoded by ZNF84, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZNF84 BINDING SITE, designated SEQ ID:852, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61925] Another function of GAM8678 is therefore inhibition of Zinc finger protein 84 (hpf2) (ZNF84, Accession NP_003419.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZNF84.

[61926] Zw10 homolog, centromere/kinetochore protein

(drosophila) (ZW10, Accession NP_004715.1) is another GAM8678 target gene, herein designated TARGET GENE. ZW10 BINDING SITE is a target binding site found in the 3' untranslated region of mRNA encoded by ZW10, corresponding to a target binding site such as BINDING SITE I, BINDING SITE II or BINDING SITE III of Fig.8. Table 4 illustrates the complementarity of the nucleotide sequences of ZW10 BINDING SITE, designated SEQ ID:10937, to the nucleotide sequence of GAM8678 RNA, herein designated GAM RNA, also designated SEQ ID:347.

[61927] Another function of GAM8678 is therefore inhibition of Zw10 homolog, centromere/kinetochore protein (drosophila) (ZW10, Accession NP_004715.1) . Accordingly, utilities of GAM8678 include diagnosis, prevention and treatment of diseases and clinical conditions associated with ZW10.

[61928] It is appreciated by persons skilled in the art that the present invention is not limited by what has been particularly shown and described hereinabove. Rather the scope of the present invention includes both combinations and subcombinations of the various features described hereinabove as well as variations and modifications which would occur to persons skilled in the art upon reading the

specifications and which are not in the prior art.

[61929] DETAILED DESCRIPTION OF LARGE TABLES

[61930] Table 1 comprises data relating to the source and location of novel GAM genes of the present invention, and contains the following fields: GENE NAME: Rosetta Genomics Ltd. gene nomenclature (see below); GAM SEQ-ID: GAM Seq-ID, as in the Sequence Listing; PRECUR SEQ-ID: GAM precursor Seq-ID, as in the Sequence Listing; ORGANISM: Abbreviated (hsa = Homo sapiens); CHR: Chromosome encoding the GAM gene; CHROMOSOME OFFSET: Offset of GAM precursor sequence on chromosome; SOURCE_REF-ID: Accession number of source sequence; SOURCE_OFFSET: Offset of GAM precursor sequence on source sequence; SRC: Source-type of GAM precursor sequence (see below); GAM ACC: GAM Prediction Accuracy Group (see below);

[61931] Table 2 comprises data relating to GAM precursors of novel GAM genes of the present invention, and contains the following fields: GENE NAME: Rosetta Genomics Ltd. gene nomenclature (see below); PRECUR SEQ-ID: GAM precursor Seq-ID, as in the Sequence Listing; PRECURSOR SEQUENCE: GAM precursor nucleotide sequence (5' to 3'); FOLDED-PRECURSOR: Schematic representation of the GAM folded precursor, beginning 5' end (beginning of

upper row) to 3' end (beginning of lower row), where the hairpin loop is positioned at the right part of the draw;
SRC: Source-type of GAM precursor sequence (see below);
GAM ACC: GAM Prediction Accuracy Group (see below);

[61932] Table 3 comprises data relating to GAM genes of the present invention, and contains the following fields: GENE NAME: Rosetta Genomics Ltd. gene nomenclature (see below); GAM SEQ-ID: GAM Seq-ID, as in the Sequence Listing; GENE_SEQUENCE: Sequence (5' to 3') of the mature, 'diced' GAM gene; PRECUR SEQ-ID : GAM precursor Seq-ID, as in the Sequence Listing; SOURCE_REF-ID: Accession number of the source sequence; SRC Source-type of GAM precursor sequence (see below); GAM ACC: GAM Prediction Accuracy Group (see below);

[61933] Table 4 comprises data relating to target-genes and binding sites of GAM genes of the present invention, and contains the following fields: GENE NAME: Rosetta Genomics Ltd. gene nomenclature (see below); GAM SEQ-ID: GAM Seq-ID, as in the Sequence Listing; TARGET: GAM target protein name; #BS: Number of unique binding sites of GAM onto Target; TARGET SEQ-ID: Target binding site Seq-ID, as in the Sequence Listing; TARGET REF-ID: Target accession number (GenBank); UTR: Untranslated region of

binding site/s (3' or 5'); UTR OFFSET: Offset of GAM binding site relative to UTR; TAR-BINDING-SITE-SEQ: Nucleotide sequence (5' to 3') of the target binding site; BINDING-SITE-DRAW: Schematic representation of the binding site, upper row present 5' to 3' sequence of the GAM, lower row present 3' to 5' sequence of the target; SRC: Source-type of GAM precursor sequence (see below); GAM ACC: GAM Prediction Accuracy Group (see below); BS ACC: Binding-Site Accuracy Group (see below); TAR ACC: Target Accuracy Group (see below);

[61934] Table5 comprises data of gene function references – Bibliography and contains the following fields: GENE NAME: Rosetta Genomics Ltd. gene nomenclature (see below); TARGET: GAM target protein name; REFERENCES: list of references relating to the target gene; SRC: Source-type of GAM precursor sequence (see below); GAM ACC: GAM Prediction Accuracy Group (see below); TAR ACC: Target Accuracy Group (see below); and

[61935] The following conventions and abbreviations are used in the tables:

[61936] GENE NAME is a RosettaGenomics Ltd. gene nomenclature. All GAMs are designated by GAMx where x is the unique SEQ-ID.

- [61937] SRC is a field indicating the type of source in which novel genes were detected, as one of the following options: (1) TIGR Intergenic, (3) EST or Unigene Intron Intergenic, (4) TIGR Intron, (6) DNA Intergenic, (7) DNA Intron, (8) DNA Exon. Sequences are based on NCBI Build33 of the human genome. TIGR source is based on "Tentative Human Consensus" (THC) The Institute for Genomic Research which are not found in mRNA Intron/Exon according to NCBI GenBank genome annotation.
- [61938] GAM ACC (GAM Prediction Accuracy Group) of gene prediction system: A- very high accuracy, B- high accuracy, C- moderate accuracy, D-low accuracy, as described hereinbelow with reference to Fig.21.
- [61939] BS ACC (Binding-Site Accuracy Group) indicates accuracy of target binding site prediction, a- very high accuracy, b- high accuracy, c- moderate accuracy, as described hereinabove with reference to Fig.14B.
- [61940] TAR ACC (Target Accuracy Group) indicates accuracy of total GAM-target binding prediction, considering the number of binding sites a GAM has on the target's UTR; a- very high accuracy, b- high accuracy, c- moderate accuracy, as described hereinabove with reference to Fig.14B.